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Environmental
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section 4(f)
evaluation for BR
9048(14)
Yellowstone River

Environmental Assessment
and
Programmatic Section 4(f) Evaluation
For
BR 9048(14)
YELLOWSTONE RIVER - WEST OF REEDPOINT
P.M.S. CONTROL NO. 2477
IN
STILLWATER COUNTY, MONTANA

MONTANA DEPARTMENT OF TRANSPORTATION

AND

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

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For
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STILLWATER COUNTY, MONTANA**

This document is prepared in conformance with requirements of the National Environmental Policy Act (NEPA) and contains information necessary for an environmental assessment (EA) under 23 CFR 771.119 and 40 CFR 1500 to 1508. It also is prepared in conformance with requirements of the Montana Environmental Policy Act (MEPA) for an EA under the provisions of ARM 18.2.237(2) and 18.2.239.

Submitted pursuant to 42 U.S.C. 4332(2)(c),
and Sections 75-1-201 & 2-3-104, M.C.A.

by the
Montana Department of Transportation
and
U.S. Department of Transportation, Federal Highway Administration

Submitted by:

May 18, 1999
Date

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5-18-99
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1. PURPOSE AND NEED FOR ACTION

Figure 1-1 is a general map of the project location. The proposed project is located on a rural road beginning at the north edge of the community of Reed Point and extending across the Yellowstone River to the north in Stillwater County in south central Montana. Columbus, the county seat, is 27.4 kilometers (km) — 17 miles (mi) — east on Interstate Highway 90.

The Montana Department of Transportation (MDT), in conjunction with the Federal Highway Administration (FHWA), proposes to construct a new bridge over the Yellowstone River at this location. This project also includes reconstruction of roadway approaches north and south of the bridge. The existing bridge and abandoned sections of roadway approaches will be removed.

The intent of the project is to replace the existing bridge which has been determined structurally deficient and functionally obsolete and to improve the existing approach roadways to meet design criteria for a desired design speed of 60 km/h (35 mph). This will allow current load restrictions on the bridge to be removed and will improve safety and operation for the traveling public.

1.1 Existing Bridge and Approaches

The length of the existing bridge is 143 meters — 470 feet (ft) — with a 4.6 m (15 ft) wide, single-lane roadway. This structure consists of three 45.7 m (150 ft) span steel Parker trusses and a 6.1 m (20 ft) approach span on the south end. Each truss supports timber stringers and timber plank decking. The bridge was built in 1911.

The current Sufficiency Rating for the bridge is 11.3 on a 100 point scale. The Sufficiency Rating is a composite of several ratings of individual bridge items that rate the structural condition and geometry of the bridge. A bridge with low ratings on the structural condition items will be designated structurally deficient and a bridge with poor ratings for geometry items will be designated as functionally obsolete. This bridge is rated both structurally deficient and functionally obsolete.

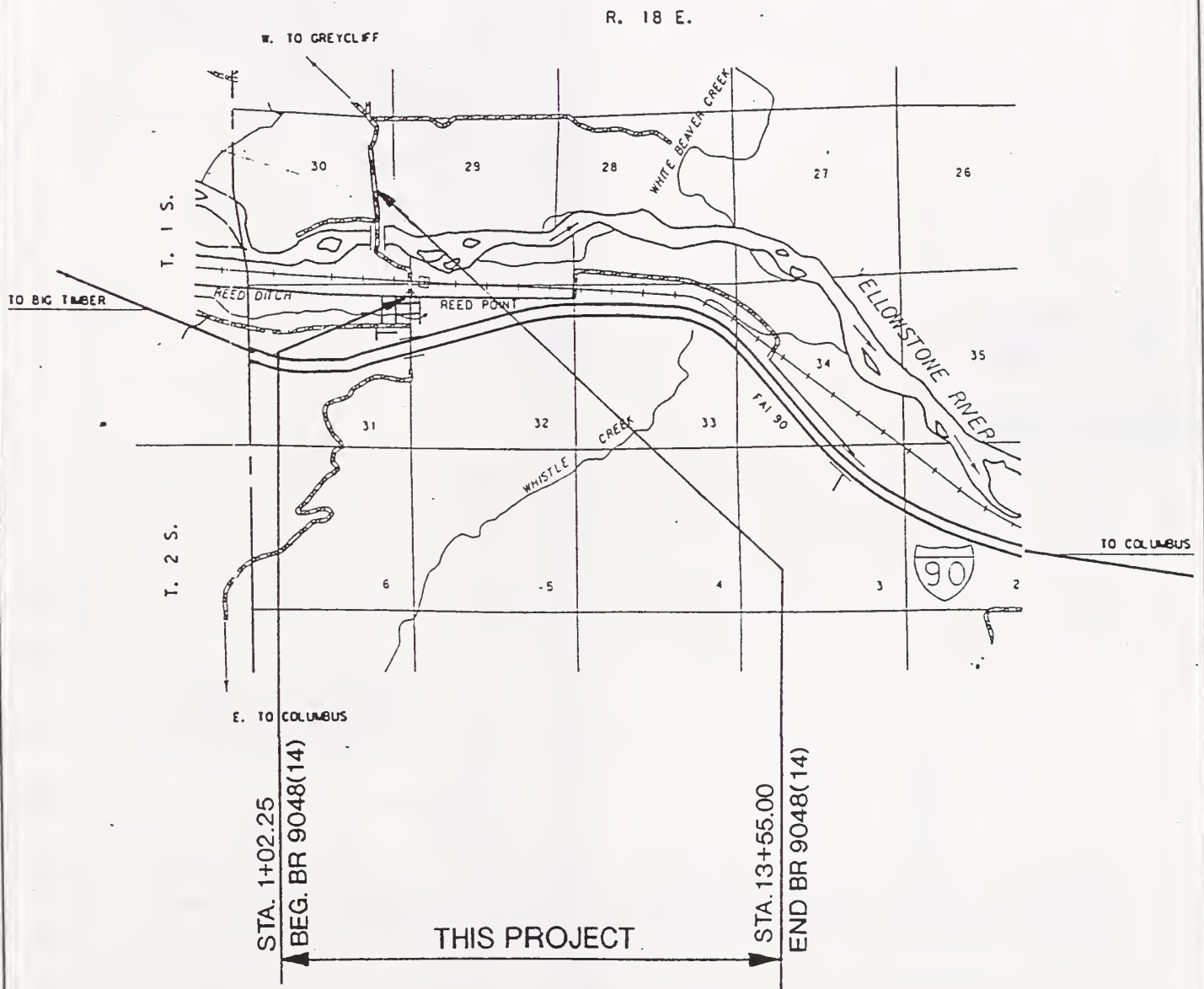
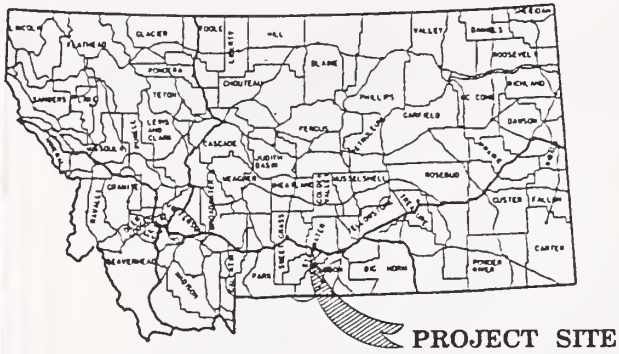
The existing horizontal alignment of the south approach (see Figure 1-2) consists of two sharp horizontal curves, one of which is at the south end of the bridge — design speed of these curves is substantially below the desired design speed. The horizontal alignment of the north approach consists of tangents and smooth flowing curves and meets requirements for the desired design speed.



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FIGURE 1-1
PROJECT LOCATION MAP



FEDERAL AID PROJECT NO. BR 9048(14)
YELLOWSTONE RIVER-W. OF REEDPOINT
STILLWATER COUNTY

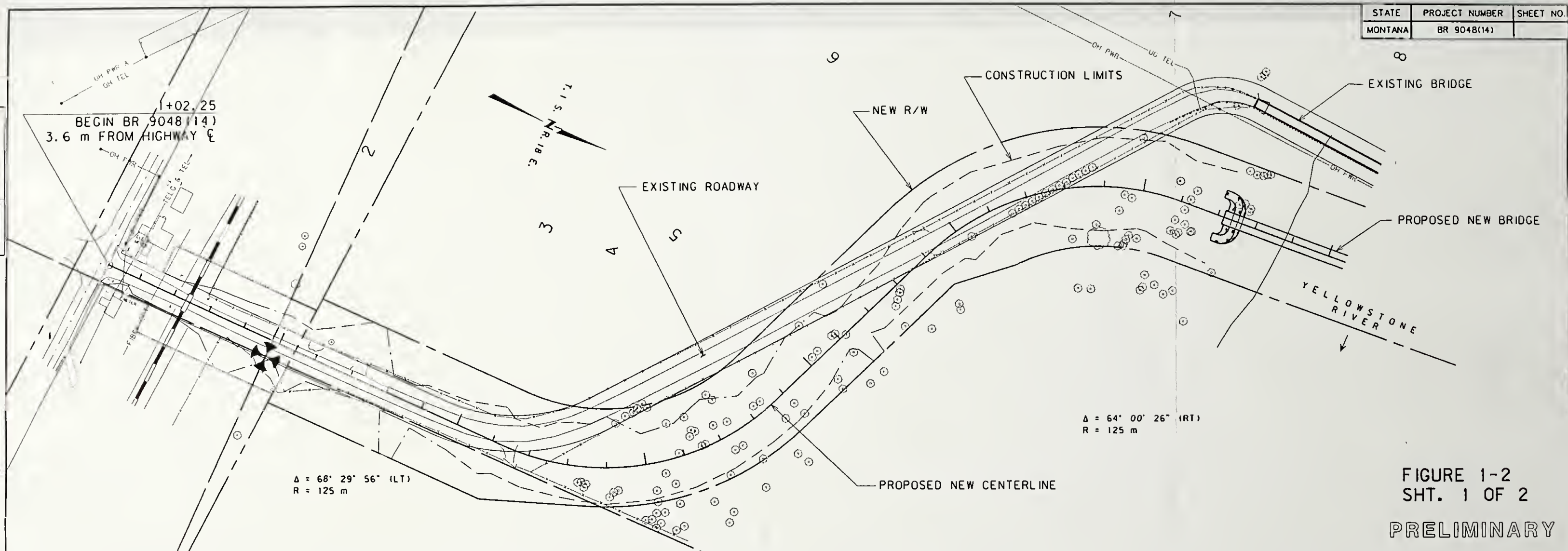
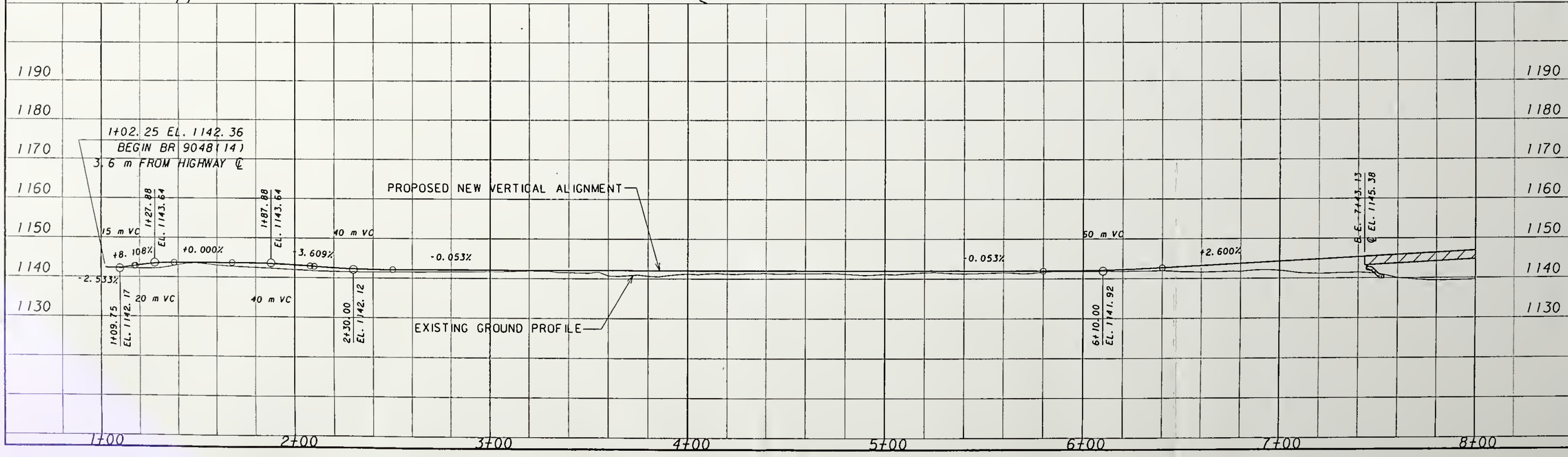


FIGURE 1-2
SHT. 1 OF 2
PRELIMINARY



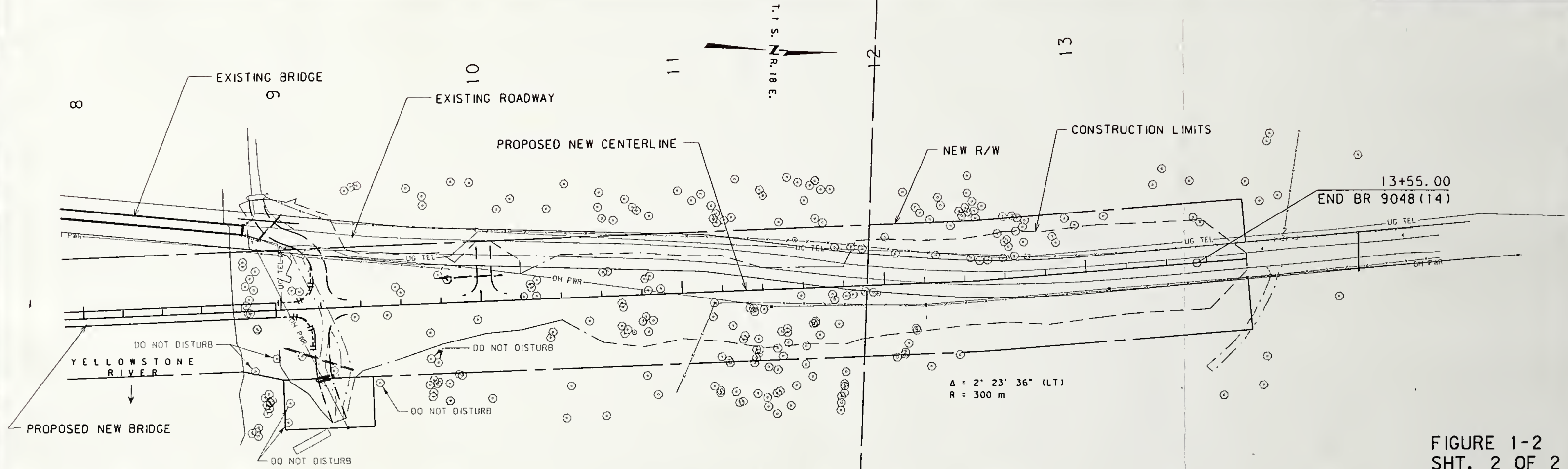
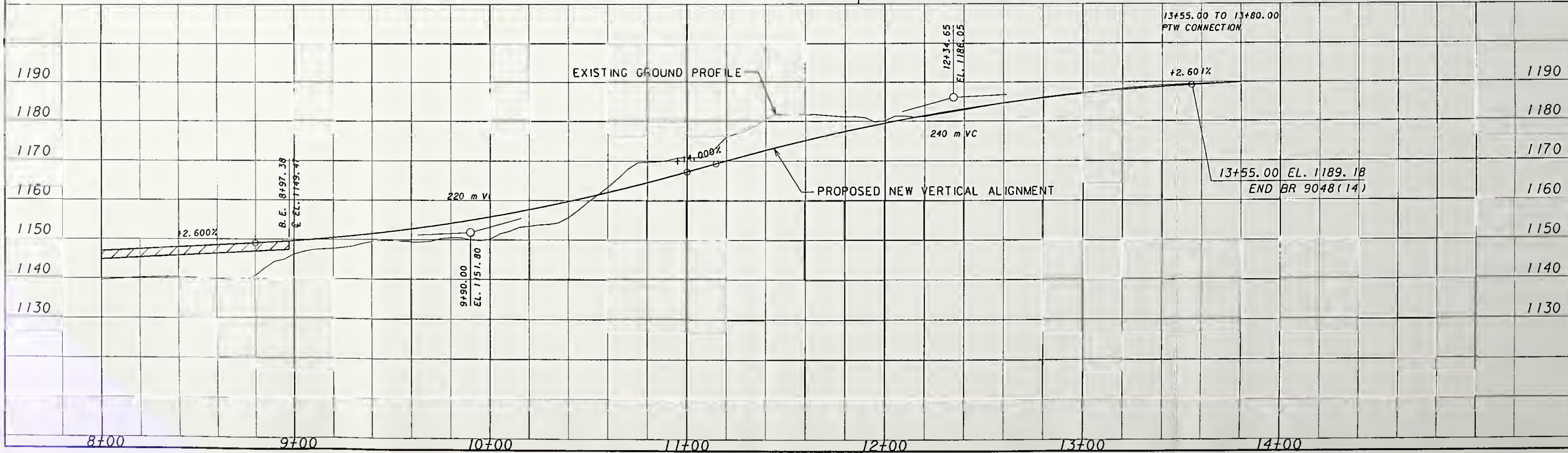


FIGURE 1-2
SHT. 2 OF 2
PRELIMINARY



The vertical alignment of the existing south approach consists of a nearly flat grade, which rises abruptly to match the bridge end. The vertical alignment of the existing north approach is a 300 m (1000 ft) uphill grade from the bridge. These approach roadways are surfaced with gravel.

An existing private roadway approach serves a residence northeast of the structure, and an existing public roadway approach serves the Indian Fort Fishing Access Site (FAS) and private residences northwest of the structure.

1.2 Proposed Bridge and Approaches

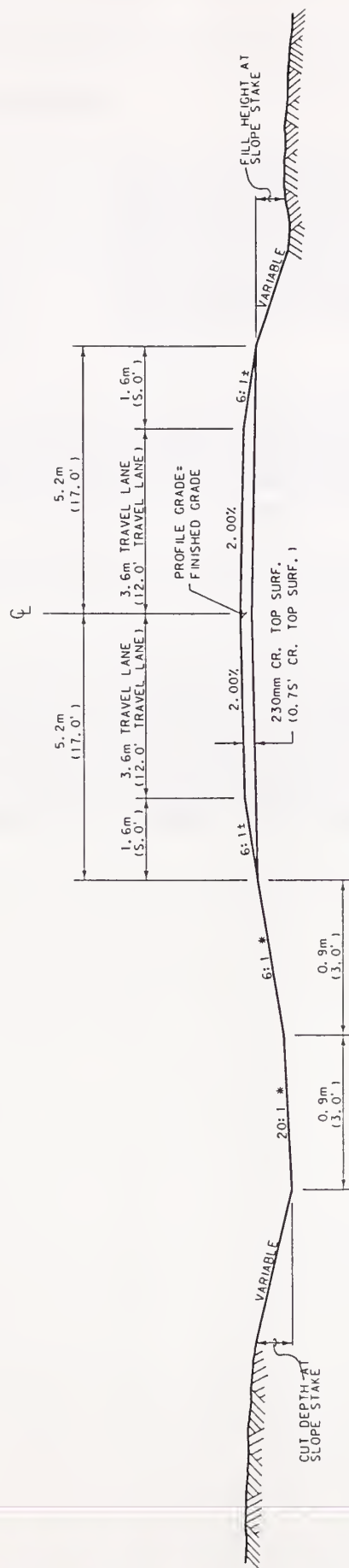
The proposed project will provide a new bridge structure with a 7.2 m (24 ft) wide finished top and two 3.6 m (12 ft) driving lanes. The new bridge will be located slightly downstream of the existing bridge — approximately 60 m (195 ft) on the south end and 35m (115 ft) on the north end. The bridge will include four spans of approximately 38.5 m (126 ft) each for a total length of approximately 154 m (505 ft). The project's total length is 1.353 km (0.841 mi), including a 741 m (2431 ft) south approach, the 154 m (505 ft) bridge, and a 458 m (1500 ft) north approach.

Approach roadways will also be 7.2 m (24 ft) wide with a 230 millimeter (mm) — 0.75 ft — gravel surface and 6 to 1 (horizontal to vertical) surfacing inslopes as shown on Figure 1-3. Two horizontal curves with radii of 125 m (410 ft) will be constructed south of the bridge and one 300 m (1000 ft) curve will be constructed at the north end of the project to merge with the existing roadway to the north. Vertical grades south of the bridge will be less than 1%.

Vertical grades over the bridge will be 2.6%. Grades north of the bridge will vary up to a maximum of 14% for a short distance. Horizontal and vertical alignments of the new approach roadways will be designed to meet design requirements and guidelines for the desired 60 km/h (35 mph) design speed, except for the 14% vertical grade. This grade exceeds the 12% maximum grade allowable for this type of roadway so a design exception will be needed from the Federal Highway Administration.

Existing approaches to adjacent land will be perpetuated, where needed, by connecting them to the new bridge approach roadways. The height of the bridge's railing will be 1 m (3.3 ft) to protect livestock from falling off the bridge.

FIGURE 1-3
TYPICAL ROADWAY SECTION
REEDPOINT, MONTANA
PROJECT NO. BR 9048(14)



1.3 Traffic and Safety

Traffic data at the bridge are as follows:

1999 ADT	180	Present Average Daily Traffic
2019 ADT	270	Design Year Average Daily Traffic
DHV	50	Design Hourly Volume
D	55/45%	Directional Distribution
T	14.6%	Trucks, Medium and Heavy
All Trucks	69.4%	All Trucks

These existing and projected traffic volumes and characteristics were measured and estimated by the Montana Department of Transportation as part of their on-going traffic counting program. Projections are based on past growth rates and, where available, estimated social and economic growth factors for the state, region, county and locality.

These data are part of the information used to determine appropriate design speeds and design guidelines and standards.

A review of the computer database of the Safety Management System of the Montana Department of Transportation indicates that only one accident occurred on the bridge or approach roadways during the three-year period from 1996 to 1998. This accident occurred in daylight on a dry roadway with cloudy weather and involved a truck traveling north that failed to negotiate the existing curve at the south end of the bridge. The truck struck the approach guardrail.

2. DESCRIPTION OF ALTERNATIVES

2.1 The No-Action Alternative

This alternative is included as required by Paragraph 1502.14(d) of the CEQ Regulations (1986) and consists of leaving the existing bridge and approaches in their current location and condition. It does not meet the purpose and need for the project (see Section 1). There will be no cost for the construction and right-of-way (ROW) for this alternative.

2.2 The Preferred Alternative

The Preferred Alternative includes replacement of the existing bridge and approaches on the alignment shown on Figure 1-2 and Figure 2-1 and includes the design elements described in Section 1.2. The total cost for this alternative currently is estimated to be \$1,753,000: \$1,622,000 for construction and \$131,000 for right-of-way acquisition.

The alignment for this alternative was developed as a blend of the features of Alignments 1 and 2 (see Section 2.2) and seemed to be supported, at a public meetings held in 1994 and 1995 (see Section 6.1), by landowners, other members of the public and the Stillwater County Commission. This alternative meets the purpose and need for the project and was selected as the Preferred Alternative because it:

- Replaces the existing, structurally and functionally deficient bridge structure with a new structure;

- Provides a horizontal and vertical alignment that meets design criteria of the Montana Department of Transportation and the Federal Highway Administration;

- Minimizes impacts on irrigated farmland – 0.315 ha (0.78 ac) of irrigated farmland will be converted to right-of-way; and

- Minimizes superelevation on the bridge deck.

2.3 Alternatives Previously Evaluated but Dropped From Consideration

Rehabilitation of the existing bridge was considered but, due to its narrow width, deteriorated substructure, extent of rehabilitation necessary to achieve legal acceptable loads and poor alignment of approach roadways, was not pursued further.

Alignment alternatives upstream from the existing bridge were evaluated but were dropped from consideration because the resulting approach roadways would have encroached on an access easement to a Section 4(f) property (the Indian Fort Fishing Access Site).

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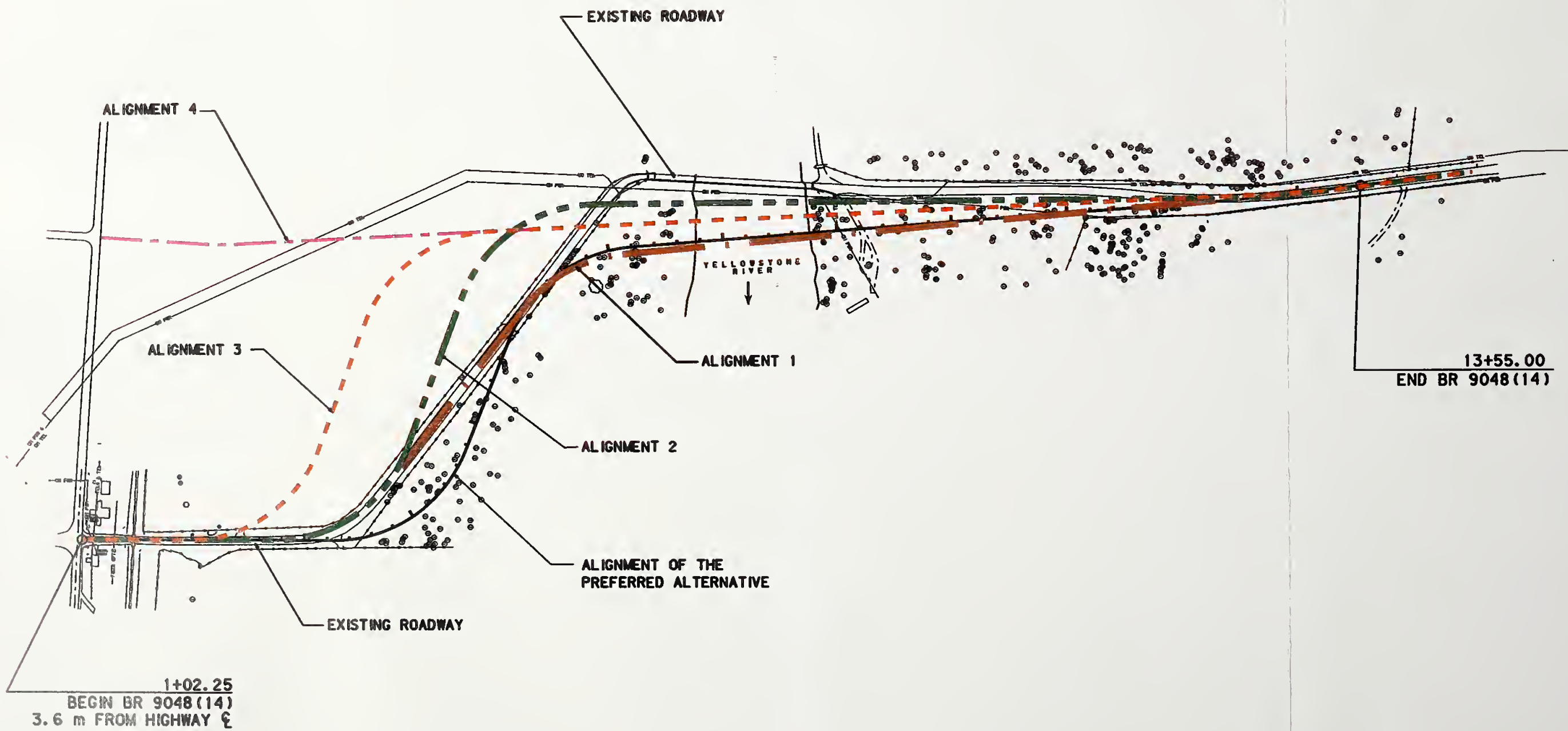


FIGURE 2-1

Four alignment alternatives downstream from the existing bridge were evaluated during the planning stages of this project. None of these alignments affect the easement to the 4(f) property. These alignments are shown on Figure 2-1 and are discussed below along with reasons they were dropped from consideration:

Alignment 1 would have the least impact on farmland, with 0.1 hectares (ha) — 0.3 acres (ac) — of irrigated farmland would be converted to right-of-way. It was dropped from consideration because it would require substantial superelevation on the bridge. Stillwater County has indicated that, because of the tendency of ice to develop on a structure before it occurs on the remainder of a roadway, they have had considerable safety problems with superelevation on bridges and, as a result, they are strongly opposed to Alignment 1.

Alignment 2 would be a compromise between Alignments 1 and 3. It requires less superelevation on the bridge (2%) while having less impact on farmland. It was dropped from consideration because landowners were opposed to it because they felt it still impacted too much farmland; 1.2 ha (2.9 ac) of irrigated farmland would be converted to right-of-way or would be severed and become unusable.

Alignment 3 would allow an alignment with no horizontal curve on the bridge and, consequently, no superelevation on the bridge deck. It was dropped from consideration because landowners were strongly opposed to it because of its impacts on farmland; 2.9 ha (7.2 ac) of irrigated farmland would be converted to right-of-way or would be severed and become unusable.

Alignment 4, as shown on Figure 2-1, would provide a nearly straight alignment across the bridge with no curves or superelevation on the bridge. It was dropped from consideration because landowners were strongly opposed to it because of its impacts on farmland. It would convert approximately 1.3 ha (3.2 ac) of irrigated farmland to right-of-way, and it would divide an existing irrigated field into two sections that would be difficult and much less efficient to irrigate.

3. AFFECTED ENVIRONMENT AND IMPACTS

The following sections discuss how the No-Action Alternative and the Preferred Alternative may affect the human environment, including land and land use, social and economic effects on the local community, air and water quality, and impacts to wildlife. In addition, discussion is presented of mitigation measures aimed toward minimizing the impacts of the Preferred Alternative.

3.1 Social and Economic

There are no known communities or concentrations of minorities in the project area.

Activities in the project area include ranching, farming, and recreational fishing and boating in and along the Yellowstone River. The existing bridge provides direct access across the Yellowstone River for residents on the north side of the river to and from the town of Reed Point which is located just south of the river. Alternative routes to the area served by the existing bridge include Springtime Road via I-90 — about 12.9 km (8 mi) due east of Reed Point — and County Roads 8 and 9 via the town of Greycliff — about 20.9 km (13 mi) west of Reed Point.

Farmers and ranchers transport livestock and agricultural products across the bridge. Livestock move between pastures on either side of the river. The bridge also provides access to I-90 and markets for agricultural products.

The Yellowstone River is recognized as a Blue Ribbon fishery and attracts sport fishermen worldwide. The existing structure serves as an access to the Indian Fort Fishing Access Site located west of Sta. 9+00.

3.1.1 Social Impacts

With the No-Action Alternative, perpetuation of the existing structurally deficient and functionally obsolete bridge may have a long-term adverse effect on activities involving recreation, schools, churches, businesses, police, fire protection and other social groups and activities. No improvements in transportation would be realized and, as the bridge continues to deteriorate, further reductions in traffic operation on the bridge may occur.

Eventual failure of the existing bridge would prevent traffic and emergency services from crossing the river. Continued deterioration of the bridge could result in a catastrophic failure that imperils life and property.

No adverse effects of the Preferred Alternative have been identified on school districts, recreation areas, churches, businesses, police, fire protection and social groups. The Preferred Alternative should have a positive effect on these groups and activities because it would provide safer, more efficient and convenient travel across the river.

With the Preferred Alternative, it is anticipated that social conditions and activities would not be disrupted or impacted during construction — the existing bridge would remain in-service throughout the construction of the proposed new bridge.

3.1.2 Social Mitigation

No social mitigation measures are proposed for the Preferred Alternative.

3.1.3 Economic Impacts

The No-Action Alternative may have a long-term negative impact on economic conditions in the area. The current condition and design limitation of the existing bridge requires a weight restriction of 11 tons for single axle trucks. In addition, the width of the superstructure restricts load widths to less than 4.6 m (15 ft.) and allows only one-way traffic. Continued deterioration of the existing structure may require further load restrictions or complete closure of the bridge. Further load restrictions would necessitate rerouting of larger loads via alternate routes and, in the event of bridge closure, rerouting all bridge traffic.

With the Preferred Alternative, it is anticipated that economic activities would not be disrupted or impacted during construction — the existing bridge would remain in-service throughout the construction of the proposed new bridge.

The Preferred Alternative would provide a facility with a positive impact on transportation for farming, ranching, recreation and other segments of the economy. The weight restrictions would no longer be required and the roadway would be much more convenient and comfortable to drive because two-way use of the bridge would be available and horizontal and vertical alignments would be better.

The Preferred Alternative would have a short-term beneficial economic impact on the local and regional economy. It should provide a number of job opportunities for local construction laborers and service providers and most construction materials would be purchased in the region and in Montana.

As indicated in Section 3.3, acquisition of additional right-of-way would be required for the Preferred Alternative. This land would be acquired as a permanent easement and would therefore not be removed from the tax roles of Stillwater County.

3.1.4 Economic Mitigation

Because no adverse impacts have been identified, no economic mitigation measures are proposed or required for the Preferred Alternative.

3.2 Visual

The existing view of the project site includes the existing gravel-surfaced roadway and the existing bridge. The elaborate lattice-work of this structure is representative of design and small bridge construction technology prevalent during the turn of the century. It is presumed that some individuals find the overall structural esthetics of the bridge appealing. Likewise, some individuals might consider the structure as a detraction from the scenic quality of the valley area and Yellowstone River.

The existing view from the roadway includes the railroad; the irrigated fields south of the river and left (west) of the existing roadway; grazing land with light brush south of the river and right (east) of the existing roadway; the Yellowstone River; steep rock excavated areas north of the river and left (west) of the existing roadway; and grazing land with light brush north of the river on both sides of the roadway. The view from the existing bridge is somewhat obstructed by the superstructure.

The No-Action Alternative would have no impact on existing views from the bridge and roadway or on views of the bridge and roadway.

The Preferred Alternative would change the view of the roadway by replacing the existing single-lane four span Parker steel truss structure with a two-lane prestressed concrete beam and pier structure. The new bridge and north and south realignments would be constructed downstream of the existing structure. New roadway embankments would have smooth lines and would be constructed to conform to and blend with existing terrain as much as practical. Portions of the existing roadway that are no longer needed would be obliterated. All areas disturbed by construction will receive topsoil and will be seeded with vegetation suitable to the area. The existing bridge structure will be removed and disposed of properly.

The Preferred Alternative would include a bridge with simple lines and low profile. As with the existing structure, both positive and negative opinions may be found regarding visual impacts of this structure.

A residence is located right (east) of Station 9+20. With the Preferred Alternative at this location, the finished elevation of the new roadway would be about 2.8 m (9.2 ft) higher than the existing roadway which would increase the prominence of the roadway in the viewscape from this residence. The bridge also would obstruct some of the view from the residence toward the southwest and the Yellowstone River.

The view from the new bridge, with the Preferred Alternative, may improve slightly because there would be no superstructure to obstruct the view. Other aspects of the view from the project should not change.

No additional mitigation measures are proposed for the Preferred Alternative.

3.3 Land Use

The No-Action Alternative would have no impact on existing land uses.

Lands that would be directly affected by construction of the Preferred Alternative include irrigated hayfields and grazing land. No substantial development is occurring in the project area, and no land use planning or zoning has been conducted or implemented by local government agencies in the project area. There are no State or local land use plans or development plans in the area which would be impacted by the Preferred Alternative. The Preferred Alternative would continue to utilize the existing permitted railroad crossing at the southernmost end of the south approach. Realignment of the approaches would result in obliteration of portions of the existing roadway – these areas would then likely be converted to uses similar to adjacent lands.

3.3.1 Utilities

Underground telephone lines parallel the existing approaches and traverse the Yellowstone River via conduit attached to the downstream side of the existing bridge structure. An overhead power line is located about 15 m (50 ft) downstream and runs parallel to the structure.

With the Preferred Alternative, relocation of telephone and power lines would be required. It is likely they would be moved from their current location in the existing right-of-way to an appropriate location within the new right-of-way. The relocations would be completed by the utility companies involved. New, relocated lines would be constructed first and it is expected that only brief interruptions in service would occur while connections are transferred from the old lines to the new.

Utility users affected by the relocations required by the Preferred Alternative will be notified well in advance of the expected brief interruptions in service.

3.3.2 Right-of-Way

No right-of-way changes would occur under the No-Action Alternative.

The Preferred Alternative would require the acquisition of approximately 5.55 ha (13.7 ac.) of additional land. This land will be acquired, in the name of Stillwater County, as a permanent easement to serve as right-of-way for the new bridge approach roadway. In addition, approximately 0.35 ha (0.86 ac.) will be acquired as temporary construction permits for work at the railroad crossing and for construction of a private approach — once construction is complete, these permits will expire.

Because of the abandonment of unused portions of the existing bridge approach roadway, approximately 0.48 ha (1.2 ac.) of existing right-of-way easements would no longer be needed and will be transferred back to adjacent land owners.

A right-of-way impact is considered to occur when more than 10 percent of a parcel of less than 10 ha (25 ac) is acquired for ROW. This would occur in one location, with the Preferred Alternative, at the residential parcel located east of approximate Sta. 9+20 (the River's edge) to approximate Sta. 10+45. About 0.982 ha (2.43 ac.) of the 2.406 ha (5.945 ac.) parcel would be required as an easement for new ROW, or about 41 percent of the entire parcel. In addition, a 0.113 ha (0.28 ac) construction permit would be required to reconstruct the existing roadway approach. This parcel includes a residence located approximately 95 m (310 ft) from the centerline of the existing roadway and 60 m (195 ft) from the centerline of the Preferred Alternative.

Environmental impacts resulting from right-of-way acquisition for the Preferred Alternative at this parcel are not considered significant because: 1) approximately 50 percent of the right-of-way needed for the Preferred Alternative is covered by the abandoned, unused domestic landfill (see Section 3.16); 2) much of the remainder of the ROW to be acquired is covered with trees, brush and grasses and is currently unused except for the existing approach roadway from the bridge approach to the residence and a small corral; 3) trees in front of the residence will not be removed during construction; 4) a new approach with an improved alignment, grade, width and surface, a new cattle guard and a new drainage culvert will be constructed; and 5) a substantial distance will still remain between the residence and the roadway.

The acquisition of land or improvements for highway construction is governed by state and federal laws and regulations designed to protect both the landowners and the tax paying public. Landowners affected are entitled to receive fair market value for any land or buildings acquired and any damages to remaining land due to the effects of highway construction. The accepted method of determining these payments is through the appraisal process. Once an appraisal is completed, reviewed and approved, a monetary offer will be made for land and improvements needed to be acquired for construction. This offer will be discussed with the landowner and the necessary negotiations will be conducted before completing the agreement to transfer the land to highway right-of-way.

3.3.3 Farmlands

The No-Action Alternative would have no impact on farmlands.

Any irrigation ditches affected by construction of the Preferred Alternative will be realigned and reconstructed. Existing irrigation culverts will be perpetuated and additional culverts installed where necessary. Access to irrigated fields from the south approach will also be perpetuated.

The Preferred Alternative would impact 2.116 ha (5.23 ac) of land designated as prime farmland by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS). A Farmland Conversion Impact Rating form (#AD-1006) was completed for this project in accordance with the Farmland Protection Policy Act (FPPA - 7 U.S.C. 4201, et seq). The total

points for the Preferred Alternative are less than 160. Therefore, under 7 CFR 658.4(c) no additional consideration for protection is necessary. Appendix A is a copy of this form.

3.3.4 Relocation

There are no households or businesses that would require relocation under the No-Action Alternative or the Preferred Alternative.

3.4 Historical and Cultural Resources

3.4.1 General Description

A Class III cultural resources inventory was conducted in the project area in December 1994. The inventory was reviewed and approved by State Historic Preservation Office (SHPO) in 1995. One historic site, the Reed Point Bridge (Site 24ST216), was re-identified in the project area during the inventory. The former Reed Point Dump was identified as a potential site along the proposed alignment on the north side of the river.

The Reed Point Bridge

The existing Reed Point Bridge, which would be removed if the Preferred Alternative is constructed, is covered under MDT's Programmatic Agreement on Historic Roads and Bridges and no determination of eligibility is necessary. Section 106 of the National Historic Preservation Act has been complied with pursuant to the programmatic agreement.

The Reed Point Dump

The former Reed Point Dump was located in a coulee on the north side of the Yellowstone River along the proposed north approach alignment. It was estimated that 2.4 to 3 m (8-10 ft) of soil now cover the site and that the site retains little of its original integrity. Consequently, no testing of the site or Section 106 determination of effect is required. SHPO concurred with this on March 27, 1998.

3.4.2 Impacts and Mitigation

The No-Action Alternative would create no impacts on historical and cultural resources.

For the Preferred Alternative, impacts and mitigation relative to the Reed Point Bridge will occur in compliance with the *Programmatic Agreement among the Federal Highway Administration, the Advisory Council On Historic Preservation, and the Montana State Historic Preservation Office Affecting Historic Roads and Bridges in Montana* (see Appendix B).

With the Preferred Alternative, the existing Reed Point Bridge would be used as a detour route during construction of the new bridge, after which it would be removed. Efforts are currently underway to locate a responsible party to take possession of and relocate it under 23 U.S.C. 144(o)(4), as amended, and MDT's Adopt-A-Bridge Program in compliance with the *MDT Roads and Bridges Historic Preservation Plan*. The Stillwater County has been offered the bridge, but thus far has determined that it is too large to move. MDT advertised availability of the bridge with newspapers and radio stations throughout the state. The advertisements close on June 4, 1999. If no one adopts it prior to completion of the new bridge, the existing bridge will be disassembled and its components will be recycled or otherwise disposed.

The Preferred Alternative will include only the addition of fill material on the north side of the Yellowstone River at the approximate location of the former Reed Point dump. Consequently, no disturbance to this potential site is anticipated.

3.5 Section 4(f) of the U.S. Department of Transportation Act

Federally-funded actions affecting historic sites that are on, or considered as eligible for the NRHP also must comply with Section 4(f) of the U.S. DEPARTMENT OF TRANSPORTATION ACT OF 1996, as amended (49 U.S.C. 303). This compliance is discussed in the following paragraph:

The proposed project is subject to the provisions of Section 4(f) of the U.S. Department of Transportation Act (49 U.S.C. 303), as amended. These provisions apply to Federally-funded transportation actions that affect sites on or eligible for the NRHP, publicly-owned parks, recreation lands and wildlife and waterfowl refuges. This proposed action would affect the NRHP-eligible Reed Point Bridge (24ST216). To comply with Section 4(f), a "Nationwide" Programmatic Section 4(f) Evaluation has been prepared for this proposed effect on the historic Reed Point Bridge (see Appendix C).

3.6 Parks and Recreation/Section 6(f)

The Indian Fort Fishing Access Site is located approximately 0.5 km (0.3 mi) west of the existing bridge on the north side of the river. An easement and access road lead to the site from the existing roadway beginning at near Station 9+20.

The site is owned and maintained by the Montana Department of Fish, Wildlife and Parks and is considered a Section 4(f) property because it is open to the public for fishing, boating, camping and other recreational uses. Prior to 1997, the Indian Fort FAS was protected as a Section 6(f) site under the Land and Water Conservation Fund Act (MDFWP, 1994). Since 1997, the site is not considered a Section 6(f) property (MDFWP, 1997).

The Preferred Alternative would have no impact on the FAS. The bridge and approach roadway would be moved approximately 35 m (115 ft) away from (east of) the existing access road and

easement to the FAS. A new connection would be constructed and the existing access road and the easement would not change.

No other parks or recreational properties have been identified in the project area.

The No-Action Alternative and Preferred Alternative would have no impact on any parks or recreational properties.

3.7 Pedestrians and Bicyclists

With the close proximity of the existing bridge and approach roadways to the Community of Reedpoint, pedestrian and bicyclist use occurs. In addition, in the spring and fall and at other times, cattle and sheep are herded across the bridge.

The No-Action Alternative would create no change in these uses.

The Preferred Alternative would provide a wider bridge with better horizontal and vertical alignments. These factors would increase comfort and safety for pedestrians, bicyclists and other non-vehicular uses of the bridge.

3.8 Noise

Noise levels may increase at the residence located right of Station 9+20. The residence is currently located approximately 95 m (310 ft) from the centerline of the existing roadway and will be 60 m (200 ft) from the centerline of the Preferred Alternative.

Under 23 CFR 772, noise impacts occur when noise levels increase by more than 10 A-weighted decibels (dBA) or when the Noise Abatement Criteria (NAC) threshold level is approached within one dBA or exceeded.

3.9 Air Quality

No air quality impacts have been identified under the No-Action Alternative.

The project site is located in an "unclassifiable"/attainment area of Montana for air quality under 40 CFR 81.327, as amended. As such, the Preferred Alternative is not covered under EPA's Final Rule of November 24, 1993 on Air Quality conformity and therefore complies with Section 176(c) of the Clean Air Act as amended (42 USC 7521(a)). Air quality permits for operation of crushers are required from the Permitting and Compliance Division of the Montana Department of Environmental Quality (MDEQ-PCD). Construction activities must comply with all federal, state, and local air quality regulations.

Short-term impacts to air quality from gravel crushers and operation of heavy equipment on gravel roads will be mitigated as required by permit limitations and conditions covering operational requirements and emission limitations. In addition, the Standard Specifications for Road and Bridge Construction (MDT, 1995) will be implemented as applicable. The Standard presents guidelines for earthwork operations and other construction activities to help minimize air quality impacts.

Secondary impacts from the Preferred Alternative may include long-term seasonal impacts to air quality as a result of increased vehicle speeds on the improved gravel approaches. One residence 60 m (195 ft) right of the proposed center line at Sta. 9+20 was identified as being a potential receptor of airborne dust from traffic over the new approach.

Air quality mitigation measures for potential secondary impacts identified above are not required under the Preferred Alternative.

3.10 Water Quality

The No-Action Alternative would have no impact on water quality.

Implementation of the Preferred Alternative may result in temporary impacts to water quality in wetlands and the Yellowstone River. The temporary impacts would be limited to short-term increases in turbidity from streambed disturbance due to construction of piers, installation of riprap, and removal of the existing bridge. In addition, temporary water quality impacts may occur due to runoff from disturbed areas during construction.

3.10.1 Erosion Control and Seeding

If the Preferred Alternative is selected, an Erosion Control Plan will be submitted to the Montana Department of Environmental Quality's Permitting and Compliance Division in compliance with their Montana Pollutant Discharge Elimination System Regulations ([ARM 16.20.1314](#)) for this proposed project. Best Management Practices will be included in the design of this plan using guidelines as established in MDT's Highway Construction Standard Erosion Control Workplan. The objective is to minimize erosion of disturbed areas during and following construction of this proposed project.

In accordance with 7-22-2152, and 60-2-208 M.C.A., MDT will re-establish a permanent desirable vegetation community along all areas disturbed by the proposed construction. A set of revegetation guidelines will be developed by MDT that must be followed by the construction contractor. These specifications will include instructions on seeding methods, seeding dates, types and amounts of mulch and fertilizer, along with seed mix components. Seed mixes include a variety of species to assure that areas disturbed by construction are immediately stabilized by vegetative cover. The Seeding Special Provisions developed for this project will be forwarded to the responsible County Weed Board for approval.

3.11 Floodplains

The No-Action Alternative would not impact floodplains.

Executive Order #11988 and FHWA's floodplain regulations (23 CFR 650, Subpart A) require an evaluation of this proposed action to determine if any of its alternatives encroach on the "base" floodplain. The "base" floodplain is defined as the area covered by water from a "100-year" flood. The "100-year" flood represents a flood event with the probability of recurring once every 100 years. A floodplain delineated under Federal Emergency Management Administration (FEMA) criteria along the Yellowstone River is encroached by the Preferred Alternative. Stillwater County administers this floodplain for FEMA, and a Floodplain Development Permit will be required for this encroachment.

The floodplain encroachments from the Preferred Alternative occur from just north of the railroad crossing near Station 1+50 to just north of the bridge at near Station 9+00 (see Figure 2-1).

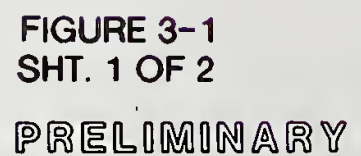
3.12 Wetlands

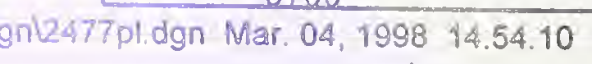
A wetland inventory was conducted in the project area on March 27, 1998. The wetland delineation was conducted in accordance with the 1987 U.S. Army Corps of Engineers (COE) Wetlands Delineation Manual (Environmental Laboratory, 1987). COE routine wetland determination data forms were completed for all wetlands identified within the ROW, as were MDT Montana wetland field evaluation forms (Berglund, 1996). Delineation results were documented in the Biological Resources Report prepared for the project (MME, 1998).

Four small wetland areas were identified in and adjacent to the proposed ROW for the Preferred Alternative as shown on the maps on Figure 3-1. Table 3.12-1 presents the Cowardin et al. (1979) wetland class, approximate location, function and value ratings, and overall wetland rating from the MDT Montana Wetland Field Evaluation Forms for each wetland delineated. Each of the four sites were rated as Category III wetlands (moderate overall rating) using the MDT evaluation form:

Site 1 is an irrigation ditch bottom, which is 10 to 12 m (33-39 ft) wide and occurs east and west of the existing alignment. Dominant species at this site include broad-leaved cattail, three-square bulrush, small-fruited bulrush, beaked sedge, and prairie cordgrass. Water within the irrigation ditch provides the source of wetland hydrology at this site.

Site 2 consists of several small depressions within a seasonal flood channel located on a heavily grazed cottonwood terrace immediately south of the Yellowstone River. Apparently, these low areas within the channel retain water as flood waters recede. These depressions are dominated by sedges, Baltic rush, and creeping spike rush. The hydrological source for Site 2 is flooding associated with the Yellowstone River.





Site 3 is a strip of emergent wetland, which is 4.6 to 6.1 m (15-20 ft) wide on the south bank of the river. It occurs between mature cottonwood riparian forest and the (currently) wetted channel. It is suspected that this site, which is dominated by creeping spike rush and Baltic rush, is under water during much of the Spring runoff period; flooding is the primary source of hydrology at this site.

Site 4 is comprised of a 4.5 m (15 ft) wide wetland fringe along the north bank of the Yellowstone River. Dominant species at this site include (seedling) sandbar willow, rough horsetail, and creeping spike rush.

Table 3.12-1 - Function/Value Ratings ¹ and Estimated Impacts at Wetlands Along the Yellowstone River - West of Reed Point Project

Wetland Characteristics	Wetland Sites			
	1	2	3	4
Approximate Stationing (not always continuous; see map)	1+94 - 2+28 (l) 2+00 - 2+28 (r)	3+66 - 4+46 (l) 3+68 - 5+40 (r)	7+62 - 7+68 (l) 7+60 - 7+68 (r)	8+76 - 8+81 (l) 8+76 - 8+81 (r)
Cowardin Class	emergent	emergent	emergent	scrub/shrub
T&E Species Habitat	none	none	moderate	moderate
MNHP Species Habitat	moderate	moderate	moderate	moderate
Wildlife Habitat	moderate	low	moderate	moderate
Fish/Aquatic Habitat	low	low	high	high
Flood Atten. and Storage	moderate	low	low	low
Sed./Nut./Tox. Removal	high	high	moderate	moderate
Sed./Shoreline Stabilization	high	high	moderate	moderate
Prod. Export/ Food Chain Support	moderate	moderate	moderate	moderate
Groundwater Discharge/ Recharge	low	low	low	low
Uniqueness	low	low	low	low
Rec./Ed. Potential	low	low	low	low
Dynamic Surf. Water Storage	N/A	N/A	N/A	N/A
Actual Points/ Possible Points	4.6/11	4/11	5.1/11	5.1/11
% of Possible Score Achieved	42%	36%	46%	46%
Overall Category	III	III	III	III
Estimated Direct Impact , ha (ac)	0.036 (0.09)	0.016 (0.04)	0.016 (0.04)	0.000 (0.00)
Additional Acreage w/in ROW and Construction Easements, ha (ac)	0.008 (0.02)	0.000 (0.00)	0.040 (0.10)	0.089 (0.22)
Total Direct Wetland Loss	0.069 ha (0.17 ac)			

¹ See completed MDT wetland field evaluation forms in the Biological Resources Report for further detail.

3.12.1 Impacts

The No-Action Alternative would have no impact on wetlands.

The alignment of the Preferred Alternative has four wetland sites (see Table 3.12-1). Three of the four sites would be directly and permanently affected by construction, primarily as a result of fill placement. Construction of the Preferred Alternative would result in a wetland loss of approximately 0.069 ha (0.17 ac). Temporary disturbance within the ROW and temporary construction easements may also occur, although these impacts cannot be quantified; precise construction techniques/approaches are unknown at this time.

Projected impacts of the Preferred Alternative at each wetland are discussed below:

- | | |
|--------|--|
| Site 1 | Approximately 0.036 ha (0.09 ac) would be lost to fill slope expansion. An additional 0.008 ha (0.02 ac) occurs within the ROW and construction easements and may be temporarily disturbed by construction. |
| Site 2 | Approximately 0.016 ha (0.04 ac) would be lost to placement of the new south approach road. |
| Site 3 | Approximately 0.016 ha (0.04 ac) would be lost to riprap placement at the south bridge abutment. An additional 0.040 ha (0.10 ac) occurs within the ROW and construction easements and may be temporarily disturbed by construction. |
| Site 4 | This site would be spanned by the new bridge (Keller pers. comm.). However, approximately 0.089 ha (0.22 ac) occurs within the ROW and construction easements and may be temporarily disturbed by construction. |

3.12.2 Mitigation

No specific compensatory wetland mitigation sites have been identified. However, MDT is currently evaluating several prospective wetland mitigation projects within the Upper Yellowstone Watershed Basin (Urban pers. comm.). These are summarized below:

- Stillwater River Project - would provide wetlands within a series of dikes at the Stillwater River between Columbus and Absarokee;
- Altman Ranch - a cooperative venture that includes MDT, FWP, the Bureau of Land Management (BLM), Pheasants Forever, and Ducks Unlimited, this project would create wetlands near Laurel at the confluence of the Clarks Fork of the Yellowstone and the Yellowstone rivers;

- Bridger Reservoir - occurs on BLM land near Bridger and would entail wetland development within an abandoned reservoir that has filled in with sediment over time;
- Miscellaneous Billings Area Borrow Sites - would involve wetland development within several former and proposed gravel pits in the general Billings area.

Given the limited wetland losses associated with the Preferred Alternative, it was recommended in the Biological Resources Report (MME, 1998) that impacts be mitigated at one of these larger mitigation projects within the same hydrological unit, rather than attempting onsite mitigation.

Until a suitable wetland mitigation site is found, the wetland impacts from this proposed project will be accounted for on MDT's Wetland Ledger.

It is assumed for purposes of this analysis that any temporary impacts to wetlands within the ROW and construction easement areas will be restored to original contours and revegetated immediately following construction.

The following general measures are recommended to minimize disturbance of wetlands and other waters of the United States during construction of the proposed project:

All Clean Water Act Section 404 permit conditions, as well as Section 401 water quality certification and Montana Stream Protection Act (124) conditions, and any additional state or federal water quality requirements/conditions should be complied with.

Removed culverts, guardrail, and other items should not be stockpiled in or adjacent to wetland or stream areas.

To minimize sedimentation as well as construction hardship, it is recommended that construction in wetlands be timed in order for these sites to be as "dry" as possible during construction, if possible.

Construction equipment operating in wetlands should be limited to that which is needed to perform the necessary work. Width of the construction ROW should be minimized to the extent possible in wetland and stream areas.

Disturbed wetland and streamside areas should be revegetated with native plant material obtained from local sources. Additionally, appropriate measures should be taken to prevent the introduction/spread of noxious weeds into wetland areas.

Hay bales, berms, or other accepted erosion/sedimentation control devices should be installed at the edges of wetlands and other waters of the U.S. prior to construction. All exposed soils should be permanently stabilized at the earliest practicable date.

Hazardous materials, including fuels and lubricating oils, should not be stored within 30 m (100 ft) of wetlands or streams. Additionally, construction equipment should not be refueled within 30 m (100 ft) of such areas.

3.13 Terrestrial Biological Resources

According to a description of ecological units prepared by Nesser et al. (1997), the project occurs in the *Montana High Plains and Foothills* ecological unit. This unit is primarily comprised of plains and foothills formed in sandstone and shale, along with terraces and fans formed in alluvium. Mean annual precipitation ranges between 30 to 50 centimeters (cm) — 12-20 in, with about 35 percent falling as snow. Chinook winds are frequent.

3.13.1 Vegetation

South of the Yellowstone River, the proposed alignment traverses upland hayfield and mature cottonwood riparian forest. Upland hayfield occurs east, west, and south of the proposed alignment and is dominated by Kentucky bluegrass, smooth brome, and orchardgrass with scattered Canada thistle. Mature cottonwood riparian forest is traversed adjacent to the river between approximate stations 3+40 and 7+60 and is dominated by mature narrow-leaf and eastern cottonwood with an understory dominated by snowberry, smooth brome, Kentucky bluegrass, and orchardgrass.

North of the river, the proposed alignment traverses steep, rocky seeded pasture/range land dominated by Ponderosa pine. Understory species include Rocky Mountain juniper, smooth sumac, smooth brome, bluebunch wheatgrass, blue grama, and yucca.

Of the 15 plants designated as noxious weeds in Montana, two were observed in the project corridor: Canada thistle and leafy spurge. Canada thistle is scattered throughout non-wetland ditches and hayfields traversed by the proposed alignment on the south side of the river, while leafy spurge is scattered throughout the mature cottonwood riparian forest community immediately south of the river.

3.13.2 Wildlife

Wildlife species inhabiting the project area are primarily typical of those which occur in grasslands, cultivated lands, and riparian areas of the high plains. The Yellowstone River and associated cottonwood riparian forest traversed by the proposed alignment contribute to increased species richness in the general area.

According to Thompson (1982), 51 mammals are known or suspected to occur in the latilong (an approximate 8300 km² (3200 mi²) block of land measuring one degree longitude by one degree latitude) which contains the proposed project. Mule deer, white-tailed deer, porcupine, raccoon,

striped skunk, coyote, thirteen-lined ground squirrel, white-tail jackrabbit, red fox, deer mouse, and long-tailed vole are common mammals occupying habitats in the general area.

According to distribution maps presented in Reichel and Flath (1995), amphibians likely to occur in the project area include the tiger salamander, western toad, woodhouse's toad, western chorus frog, northern leopard frog, and spotted frog near wetland and riverine habitats. Racer, gopher snake, western rattlesnake, western terrestrial garter snake, and common garter snake are reptiles likely to inhabit the project area.

The Montana Natural Heritage Program maintains a database of bird species observations by latilong for the period between 1992 and 1997. According to the database, 66 bird species have been reported within the quarter latilong containing the proposed project during this period. Common breeders likely to occur in the project area include American crow, American robin, northern flicker, eastern kingbird, western meadowlark, red-winged blackbird, American kestrel, spotted sandpiper, mourning dove, great horned owl, belted kingfisher, black-capped chickadee, yellow warbler, and song sparrow. No prominent nest structures, such as those constructed by raptors or great blue herons, were observed within the riparian forest community or elsewhere in the project area during a March 27, 1998 reconnaissance survey, although a few old rock dove and cliff swallow nests were observed under the existing bridge.

Waterfowl species likely to occur at times in the project area in association with the Yellowstone River include Canada goose, wood duck, mallard, gadwall, American wigeon, northern pintail, northern shoveler, redhead, and common merganser. Raptors likely to occasionally forage along the river include osprey and bald eagle. The bald eagle is discussed later in this document under Section 3.10.1 - Threatened and Endangered Species.

3.13.3 Rare and Sensitive Terrestrial Species

A search of the MNHP database revealed no known occurrences of plant or animal species of concern within several miles of the project (MNHP, 1997). The closest recorded occurrence of such species consists of a bald eagle nest occurring along the Yellowstone River approximately 5.6 km (3.5 mi) downstream of Reed Point. Plants and animals listed as species of special concern by the MNHP (1997) for which no records exist in the project area, but for which potential exists for residential (e.g., non-transitory) occurrence within local suitable habitat, are presented in Table 3.13-1. Species which could conceivably occur in the general area during migration or incidental foraging bouts are not listed in Table 3.13-1.

3.13.4 Impacts

The No-Action Alternative would have no impact on terrestrial biological resources.

Approximate impacts of the Preferred Alternative to upland vegetation communities resulting from fill placement are presented in Table 3.13-2. Additional minor, temporary disturbance

**Table 3.13-1 - Species of Special Concern that may Reside in the
Yellowstone River - West of Reed Point Project Area**

Species	1997 MNHP Ranking(s) ¹	Potential Habitat in the Project Area	Known Distribution in Project Area
few-flowered goldenrod (<i>Solidago sparsiflora</i>)	S1, G? ¹	rocky or sandy hills and canyons; north side of Yellowstone River	no records from project area; known in Stillwater County
northern leopard frog (<i>Rana pipiens</i>)	S3S4, G5	densely vegetated wetlands with standing water; Wetlands 1 and 2	no records from project area; project falls within general distribution
American white pelican (<i>Pelecanus erythrorhynchus</i>)	S2B, SZN, G5	Yellowstone River	no records from project area; indirect breeding evidence recorded in latilong
bald eagle (<i>Haliaeetus leucocephalus</i>)	S3B, S3N, G4	Yellowstone River and cottonwood riparian forest	no records from project area; nest verified 5.6 km (3.5 mi) downstream
common tern (<i>Sterna hirundo</i>)	S3B, SZN, G5	small rocky islands in Yellowstone River	no records from project area; transitory observations recorded in latilong
dickcissel (<i>Spiza americana</i>)	S1S2B, SZN, G5	tall grasslands with dense herbaceous cover; upland hayfields south of river	no records from project area; project falls within general distribution
Preble's shrew (<i>Sorex preblei</i>)	S3, G4	marshes and near streams; Wetland 1 and near Yellowstone River	no records from project area; evidence of presence recorded in latilong
¹ Not determined.			

**Table 3.13-2 - Approximate Impacts to Upland Vegetation Communities
with the Preferred Alternative**

Vegetation Community Type	Approximate Impact (fill)
Hayfield	0.88 ha (2.17 ac)
Mature Cottonwood Riparian Forest	1.16 ha (2.87 ac)
Ponderosa Pine/Seeded Pasture	1.96 ha (4.84 ac)
Approximate Totals	4.0 ha (9.88 ac)

within the ROW would likely result from construction activities. Mature cottonwoods would be avoided to the extent possible by the south approach road (Keller pers. comm.).

Virtually all of the construction would occur in areas that are immediately adjacent to the existing road or are currently subjected to other substantial sources of human disturbance including agricultural (farming, grazing) and residential activities. Consequently, habitat to be affected by the project is generally judged to be of low to moderate overall quality. As such, from a quality perspective, direct impacts to existing vegetation and wildlife habitat in the project area which would result from the proposed action are considered relatively minor.

The most limiting habitat type in the project area is mature cottonwood riparian forest adjacent to the Yellowstone River. Approximately 1.16 ha (2.87 ac) of this habitat would be lost to the new south bridge approach if the Preferred Alternative is constructed. This loss is not considered

substantial because the crossing would occur immediately adjacent to the existing road and, although it is a limiting habitat type in terms of vegetative structure and landscape position, riparian habitat is abundant in the general area along the Yellowstone River.

Construction of the Preferred Alternative may result in direct wildlife mortality; primarily to those species with limited mobility and/or those that could conceivably be occupying their burrows or nests at the time of construction (e.g., mice, voles, young birds/eggs, frogs, salamanders, snakes, badgers, ground squirrels). More mobile species, such as adult deer, coyotes, and most adult birds, would be able to avoid direct mortality by moving into adjacent habitat.

Generally, indirect disturbance to wildlife communities in the project area that the bridge and road construction activities would cause is considered minor, as the disturbance would be temporary and alternative habitat similar to that which would be affected is abundant in the general area. Survival of displaced species which resided exclusively within the construction area (e.g., species with very limited home ranges, such as mice and voles) would depend on the carrying capacity of adjacent undeveloped habitat.

With construction of the Preferred Alternative, traffic speeds would probably increase over existing conditions, despite the continued presence of a large curve at the south approach and a steep grade at the north approach. However, traffic-related wildlife mortality is unlikely to increase substantially upon construction of the project due to improved visibility and the probable habituation of some species in the area to local traffic.

As stated previously, no species of special concern are known from the specific project corridor, and none were observed during the March 1998 reconnaissance survey. Several of these species (see Table 3.13-1), however, may occur in the general area. Based on the lack of records for and observations of species of special concern in the project corridor, no significant impacts to these species are anticipated. Any of these species which are present in the project corridor, but for which no records or observations exist, would be subject to the impacts discussed above.

3.13.5 Mitigation

The following measures are required to minimize impacts to terrestrial resources:

- The construction contractor will be required to contact an MDT biologist to assess the overall status of large raptors in the project area prior to the onset of construction.
- Overhead powerlines to be relocated should be raptor-proofed in accordance with *Suggested Practices for Raptor Protection on Power Lines* (Olendorff et al. 1981).

3.14 Aquatic Resources

3.14.1 Fisheries

The primary aquatic resource in the project area is the Yellowstone River. At the point of the proposed bridge crossing, the river is approximately 80 m (262 ft) wide. At high water, the deepest point in the channel near the proposed bridge location is approximately 3.5 m (11.5 ft). Channel substrate is generally comprised of cobbles and gravels. The river is bordered along the south bank by a narrow cobble beach and emergent wetland fringe and adjacent mature cottonwood riparian forest. Along the north bank, the river is bordered by a narrow willow-dominated fringe and adjacent rocky ponderosa pine bluffs. Rainbow and brown trout are the primary species in the project reach, although neither species spawns substantially in the project area (Poore pers. comm.). These and other fish species known or suspected to occupy the Yellowstone River at Reed Point and their approximate spawning periods are listed in Table 3.14-1. No critical spawning habitat for any species was identified or is suspected in the project area (Poore pers. comm.)

3.14.2 Rare and Sensitive Aquatic Species

Rare or sensitive species are generally not expected within the subject reach of the Yellowstone River. The pallid sturgeon, a federally-listed endangered species, occurs in the Yellowstone River downstream of its confluence with the Powder River (Aderhold, 1996). The sturgeon chub, a federal candidate species for listing as threatened or endangered, also occurs in the lower reaches of the Yellowstone River; it is not known to occur in Stillwater County (USFWS, 1995).

Yellowstone cutthroat trout occur in the Yellowstone River drainage, however, they tend to occupy clear, cool streams and river headwaters and cold, clear, deep lakes with tributary streams suitable for spawning (Reel et al. 1989). According to Gresswell and Varley (1989), distribution of this species is limited to the headwaters of the Yellowstone and Snake Rivers. While approximately three to 10 percent of the population occurs upstream of Reed Point near Big Timber, this species only occurs as occasional drift through the project area (Poore pers. comm). Thus, Yellowstone cutthroat are not expected to reside in the immediate project area.

Table 3.14-1
Fish Species Known or Suspected to Occupy the Yellowstone River at Reed Point¹

Species (common name)	Species (scientific name)	Spawning Period
brown trout	<i>Salmo trutta</i>	October-December
rainbow trout	<i>Salmo gairdneri</i>	April-July
burbot	<i>Lota lota</i>	December-February
mountain whitefish	<i>Prosopium williamsoni</i>	October-November
longnose sucker	<i>Catostomus catostomus</i>	April-July
white sucker	<i>Catostomus commersoni</i>	April-June
mountain sucker	<i>Catostomus platyrhynchus</i>	June-July
goldeye	<i>Hiodon alosoides</i>	March-May
carp	<i>Cyprinus carpio</i>	May-July
longnose dace	<i>Rhinichthys cataractae</i>	Late Spring - Early Summer
mottled sculpin	<i>Cottus bairdi</i>	May-June
flathead chub	<i>Hybopsis gracilis</i>	July (?) ²
shorthead redhorse	<i>Moxostoma macrolepidotum</i>	April-May
stonecat	<i>Noturus flavus</i>	June-August
¹ Source is Ellis 1994 ² Not determined		

3.14.3 Impacts

The No-Action Alternative would have no impact on aquatic resources.

Impacts to the Yellowstone River with the Preferred Alternative would primarily occur during construction of the new bridge and approach roads and removal of the existing bridge. Ground and/or river bed disturbance associated with obliteration of the existing approach roads, removal of the existing bridge, vegetation removal, approach road construction, work bridge construction and removal, pier installation, and bridge abutment installation would result in temporary increased erosion potential, reduced slope stability, and increases in turbidity in the river downstream of the project, particularly during precipitation events. Water quality would be indirectly affected over the short and long term by the influx of fuel and other pollutants from unpaved surfaces during storm events, which could temporarily affect stream productivity in the immediate project area.

Increases in turbidity and suspended sediment could result in reductions of stream productivity, reduction of feeding opportunities for sight-feeding species, avoidance by fish of important habitat, and sedimentation of spawning habitat or eggs. Deposited sediments reduce habitat volume by filling pools and intergravel spaces which are critical to young fish. Fine sediments in stream gravels affect developing embryos by inhibiting dissipation of metabolic wastes in intergravel spaces.

As there are no critical spawning areas immediately downstream of the Preferred Alternative, no substantial impacts to fisheries are anticipated. FWP does not consider construction timing restrictions necessary relative to spawning periods (Poore pers. comm.).

3.14.4 Mitigation

The temporary impacts of the Preferred Alternative described above will be minimized by implementing standard best management practices for pollutant/sediment/erosion control during construction and through compliance with project-specific conditions to be specified in the FWP Stream Protection Act and federal Section 404 Clean Water Act permits required for the project.

3.15 Threatened and Endangered Species

Threatened and endangered species include those species listed or proposed for listing by the USFWS as threatened or endangered. Under Section 7(a) of the Endangered Species Act (16 U.S.C. 1531 - 1543), as amended, activities conducted, sponsored, or funded by federal agencies must be reviewed for their effects on species federally listed or proposed for listing as threatened or endangered. Based on range descriptions provided in the USFWS November 19, 1996 list of threatened, endangered, and proposed species that may be present in Montana, the following listed species may occur in south-central Montana and/or along the Yellowstone River:

- bald eagle (*Haliaeetus leucocephalus*: threatened)
- black-footed ferret (*Mustela nigripes*: endangered)
- peregrine falcon (*Falco peregrinus*: endangered)
- interior least tern (*Sterna antillarum athalassos*: endangered)
- pallid sturgeon (*Scaphirhynchus albus*: endangered)
- whooping crane (*Grus americana*: endangered)

Four of these species, the black-footed ferret, interior least tern, pallid sturgeon, and whooping crane are not suspected to occur in the project area and are not considered for further analysis for the reasons discussed below.

Although the project may traverse historic black-footed ferret habitat, this species is thought to be extirpated in the project area. Additionally, no prairie dog towns, the primary habitat of black-footed ferrets, were observed during the survey or are known to occur (Montana Black-Footed Ferret Working Group, 1990) within several miles of the project. On the Yellowstone River, the

interior least tern is only known to occur downstream of Miles City (Flath pers. comm; Aderhold 1996), over 320 km (200 mi) downstream of the proposed project. Similarly, the pallid sturgeon has only been found in the Yellowstone River below its confluence with the Powder River, approximately 400 km (250 mi) downstream of the proposed project (Poore pers. comm.; Aderhold, 1996). Whooping cranes migrating between Canada and Texas frequently stop in northeastern Montana (Aderhold, 1996); no occurrences have been recorded in the latilong containing the proposed project (MNHP, 1997).

The bald eagle and peregrine falcon are discussed below. No species are proposed for listing in Montana at this time.

3.15.1 Bald Eagle

The bald eagle nest site known to occur closest to the proposed project occurs approximately 5.6 km (3.5 mi) downstream on the Yellowstone River near its confluence with Sectionhouse Creek (Flath pers. comm.; FWP 1996; MNHP 1997). The next known closest eagle nest occurs on the river approximately 11.2 km (7 mi) upstream of the project near the confluence with Bridger Creek (FWP, 1996). Both nests are occupied in 1998 (Flath pers. comm.). A pair of adults was observed on the river during FWP 1998 aerial surveys near Monument Butte, approximately 2.6 km (1.5 mi) downstream of the proposed project. However, no nest was observed, and the Sectionhouse Creek nest should be the nest considered closest to the project (Flath pers. comm.). Paired birds sometimes occupy and examine an area for approximately one year before actually attempting to nest (Flath pers. comm.).

While no occupied nesting habitat would be affected by the project, it is likely that bald eagles from the Sectionhouse Creek nest, as well as non-breeding summer residents, fall and spring migrants, and winter residents occasionally forage along the river and at farm and rangeland in the general project vicinity.

The No-Action Alternative would have no impact on bald eagles.

Construction activities of the Preferred Alternative may temporarily disturb foraging activities in the immediate project vicinity (along the river and on farm and rangeland) during these periods; however, because the areas and duration of disturbance would be relatively confined and undisturbed similar habitat for displaced birds is abundant in the surrounding area, these impacts are considered to be less than significant.

Ground and/or river bed disturbance associated with construction activities of the Preferred Alternative, particularly that associated with removal of the existing bridge, would result in temporary increases in turbidity in the river downstream of the project. Water quality would be indirectly affected over the short and long term by the influx of fuel and other pollutants from unpaved surfaces during storm events, which could temporarily affect stream productivity in the immediate project area. Increases in turbidity and suspended sediment could result in reductions

of stream productivity and reduction of feeding opportunities for sight-feeding species, including bald eagles.

As there is no known occupied nesting habitat immediately downstream of the Preferred Alternative, no substantial impacts to foraging opportunities are anticipated. The temporary impacts described above will be minimized by implementing standard best management practices for pollutant/sediment/erosion control during construction and through compliance with project-specific conditions to be specified in the FWP Stream Protection Act and federal Section 404 Clean Water Act permits required for the Project.

Implementation of the Preferred Alternative would result in the loss of approximately 1.16 ha (2.87 ac) of mature cottonwood riparian forest as a result of construction of the south approach road. However, due to the affected area's relatively small size and proximity to existing roads and traffic, the Indian Fort public fishing access site, and an existing residence, it is only considered marginal potential eagle nesting habitat. Consequently, no significant impacts to potential nesting habitat are anticipated. A few potential perch trees (e.g., mature cottonwoods) along the river would, however, be lost to the new alignment.

Coordination Measures. The following coordination measures are recommended to ensure that any impacts of the Preferred Alternative to bald eagles are minimized:

- An MDT biologist should be informed of any occupied bald eagle nest observed within 0.8 km (0.5 mi) of the proposed project during construction. In some cases, construction timing restrictions may be appropriate to reduce potential impacts.
- Overhead powerlines to be relocated should be raptor-proofed in accordance with *Suggested Practices for Raptor Protection on Power Lines* (Olendorff *et al.* 1981).
- The location of construction-related activities, such as staging and borrow/gravel source activities, should be reviewed by an MDT biologist prior to construction relative to their possible impacts to bald eagles.

Determination of Effects. Based on the above information and coordination measures, it is determined that implementation of the Preferred Alternative is not likely to adversely affect the bald eagle.

3.15.2 Peregrine Falcon

Peregrine falcons may occur in the project area as spring and fall migrants. Observations of transient peregrines were recorded between 1991 and 1995 in the latilong that contains the proposed project (MBDC, 1996). No known eyries occur within several miles of the project (Flath pers. comm.; MNHP, 1997). The closest known historic eyries occur approximately 48

km (30 mi) up and downstream of the project at Springdale and Park City, respectively (Flath pers. comm.).

Potential habitat for migrating falcons in the area primarily occurs along the Yellowstone River, which receives seasonal waterfowl use.

The No-Action Alternative would have no impact on the peregrine falcon.

The Preferred Alternative would not affect any primary potential nesting habitat such as isolated rock outcrops or cliff ledges.

Construction during spring and fall may temporarily disturb peregrines foraging along the river near the project; however, it is anticipated that few, if any, peregrines would be displaced during construction. Additionally, similar foraging habitat is abundant in the immediate vicinity up and down stream of the project and would provide ample habitat for displaced birds. Therefore, impacts to migrating peregrines resulting from construction of the project are considered to be less than significant.

Coordination Measures. The following coordination measures are recommended to ensure that any impacts of the Preferred Alternative to peregrine falcons are minimized:

- Overhead powerlines to be relocated should be raptor-proofed in accordance with *Suggested Practices for Raptor Protection on Power Lines* (Olendorff *et al.* 1981).
- The location of construction-related activities, such as staging and borrow/gravel source activities, should be reviewed by an MDT biologist prior to construction relative to their possible impacts to peregrine falcons.

Determination of Effects. Based on the above information and coordination measures, it is determined that implementation of the Preferred Alternative is not likely to adversely affect the peregrine falcon.

3.15.3 Conclusions: Threatened and Endangered Species

Based upon implementation of the coordination measures listed above, it is determined that the proposed action is not likely to adversely affect the bald eagle or peregrine falcon. The proposed project will not affect the black-footed ferret, interior least tern, pallid sturgeon, or whooping crane. Consequently, in compliance with the agreement between MDT and the USFWS (Stockstad, 1996), the Biological Resources Report prepared for this project (MME, 1998) does not require USFWS review or written concurrence regarding these determinations of effect.

3.16 Hazardous Waste

A hazardous waste assessment conducted by MDT (August 8, 1996) identified a domestic landfill area right of about Sta. 9+60 to 10+40 which was apparently in use from the turn of the century to about 1971. After discussions with various specialists and the landowner, it was concluded that no additional documentation was required for this site.

The No-Action Alternative would have no hazardous waste impacts.

The Preferred Alternative would have no impact on the domestic landfill area because it would place fill over part of the site but no excavation would be required.

Heavy equipment and machinery fueled and lubricated by petroleum products and other regulated substances commonly employed in large construction projects, are potential sources of hazardous materials if accidentally released into the environment. For the Preferred Alternative, the construction contractor will be required to take precautions to minimize the effects of construction operations and to prevent leakage or spilling of fluids from the equipment.

3.17 Construction

The No-Action Alternative would have no construction impacts.

With the Preferred Alternative, traffic will be maintained on the existing bridge until the new bridge is complete and ready for use. During construction of approach roadways, traffic will be maintained through the construction area at all times and only minimal delays are expected.

The construction contractor will be required to coordinate with landowners in the area to allow necessary and customary sheep and cattle herding.

Use of the Yellowstone River for recreational purposes should not be impacted during construction. The river will be posted upstream and downstream to forewarn boaters and anglers of the construction so that they may proceed with caution.

3.18 Commitment of Resources

With the No-Action Alternative, commitment of resources would be required to maintain the existing bridge structure and reverse extensive deterioration reported in a February 1995 inspection. Expenditures for maintenance and repairs could be extensive given the current condition of the existing structure.

Implementation of the Preferred Alternative involves a commitment of natural, physical, human and fiscal resources. Land used in the construction of the Preferred Alternative would be considered an irreversible commitment during the time period that the land is used for a roadway

facility. However, if a greater need should arise for use of the land or river passage, or if the roadway facility and bridge no longer serve the purpose and need identified, the land could be converted to another use and the bridge could be removed as necessary. At present, there is no reason to believe that such a conversion would ever be necessary or desirable.

Considerable amounts of fossil fuels, labor and construction materials such as cement and aggregate would be expended by the Preferred Alternative. In addition, considerable amounts of labor and natural resources would be used in the fabrication and preparation of construction materials. These materials are generally not retrievable. However, they are not in short supply and their use would not have an adverse effect upon continued availability of these resources.

The commitment of these resources would be based on the concept that residents in the immediate area, state and region would benefit by the improved quality of the transportation system. These would consist of improved accessibility and safety, savings in time and greater availability of quality services which are anticipated to outweigh the commitment of these resources.

3.19 Environmental Justice

No concentrations of minorities and/or low-income groups have been identified in the vicinity of the proposed project.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Population and Low-Income Populations, has been observed for this proposed project. Implementation of the No-Action Alternative or the Preferred Alternative would not create disproportionately high and/or adverse effects in the health or environment of minority and/or low-income populations. This proposed project is also in-compliance with the provisions of Title VI of the Civil Rights Act (42 U.S.C. 2000) under the FHWA's regulations (23 CFR 200).

3.20 Permits Required

The No-Action Alternative would require no immediate construction permits or coordination. Depending on the nature of future required maintenance operations, appropriate permits may be required in the future.

This Preferred Alternative will be in compliance with the provisions for both Water Quality under 75-5-401(2) M.C.A. for Section 3(a) authorizations, and Stream Protection under 87-50-501 through 509 M.C.A., inclusive.

A 124SPA Stream Protection Permit will be required by the Montana Department of Fish, Wildlife and Parks for the Preferred Alternative.

The Preferred Alternative will require the following permits under the Clean Water Act (33 U.S.C. 1251 - 1376):

A Section 402/Montana Pollutant Discharge Elimination permit from the Montana Department of Environmental Quality's Permitting and Compliance Division.

A Section 404 permit from the U.S. Army - Corps of Engineers. The COE will be notified that this proposed project qualifies for a "Nationwide" 404 permit under the provisions of 33 CFR 330.

All construction work will also be in accordance with the Water Quality Act of 1987 (P.L. 100-4), as amended.

3.21 Secondary and Cumulative

The No-Action Alternative would create no secondary or cumulative impacts.

The Preferred Alternative would involve replacement of an existing highway facility. No secondary projects have been identified that would result from the construction of the Preferred Alternative.

Cumulative impacts result from ongoing and/or actions similar and/or in close proximity to the proposed project. Active and proposed MDT projects (to be constructed this year or in the years 2000, 2001 or 2002) in the area of the proposed project — within 5 km (3 mi) — include four separate projects on I-90 that would provide resurfacing or bridge rehabilitation of existing facilities only. With these improvements, no new roadways, addition of traffic lanes or other improvements that would alter traffic patterns or volumes are planned and none of the improvements would create any significant environmental impacts. Therefore, none of these other MDT projects would have any significant cumulative environmental impacts on this proposed action. The Preferred Alternative would also have no significant cumulative environmental impacts on these other MDT projects in this part of the MDT Billings District No. 5.

None of the Cooperating Agencies have identified any ongoing or proposed actions that would be affected by, or have impacts on this proposed action.

4. REFERENCES

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5. LIST OF PREPARERS

Contractor

Morrison-Maierle Environmental Corp.
Helena, MT
Brad Peterson

Subcontractor

Ethnoscience
Billings, MT
Lynn Peterson

Assistance was also provided by the following agencies:

Stillwater County
Columbus, MT
Charles Egan, County Commissioner

Montana Department of Transportation
Helena, Bozeman & Billings, MT
Joel Marshik, Manager, Environmental Services

U.S. Department of Transportation, Federal Highway Administration
Helena, MT
Janice Brown, Administrator, Montana Division

6. CONSULTATION AND COORDINATION

6.1 Cooperating Agencies

Cooperating Agencies on this proposed project, under the provisions of 23 CFR 771.111(d), include:

Stillwater County

Montana Department of Natural Resources and Conservation, Southern Land Office

Montana Department of Environmental Quality

Montana Department of Fish, Wildlife and Parks

Coordination efforts were initiated on 30 November 1994, when a notice of intent was issued by MDT to federal, state, and local agencies and affected private organizations and individuals. Comments and information relevant to this project were requested and a public meeting was held on December 6, 1994.

Agencies that have been consulted and have provided comments, include:

Montana Department of Fish, Wildlife and Parks
Helena, MT

U.S. Department of the Interior
Fish and Wildlife Service
Helena, MT

Montana State Historic Preservation Office
Helena, MT

Montana Department of Natural Resources and Conservation, Southern Land Office
Billings, MT

This environmental assessment has been sent to federal, state, and local agencies and to other interested individuals who are known to have an interest in the proposed project.

A location and design public hearing will be held if requested.

Written comments will be invited from all interested parties. If appropriate, following receipt of written comments, the Montana Department of Transportation will prepare a separate document recommending a Finding of No Significant Impact (FONSI) for the project. The FONSI will

incorporate this Environmental Assessment (EA) and any other appropriate environmental information. If it is determined that the proposed project would cause significant environmental impacts, then an Environmental Impact Statement (EIS) will be prepared.

Appendix D presents copies of correspondence for the project.

6.2 Agencies with Jurisdiction and/or with Permits Required

The sponsors have corresponded and coordinated their planning and review activities with the regulatory agencies listed below. The list also identifies permits and regulatory coordination required by each agency.

State of Montana

- Department of Environmental Quality, Helena, Montana
Water Quality under 75-5-401(2) M.C.A. for Section 3(a) authorizations
Stream Protection under 87-5-501 through 509 M.C.A., inclusive
Section 402/Montana Pollutant Discharge Elimination Permit
- Department of Fish, Wildlife and Parks, Helena, Montana
124SPA Stream Protection Permit
- State Historical Preservation Office, Helena, Montana
Concurrence with Finding of No Effect for Cultural Resources
- Montana Department of Natural Resources and Conservation, Southern Land Office
Billings, Montana
Land Use License Permit for Navigable Waters
Right of Way Easement in State Lands

United States

- Federal Emergency Management Agency
Floodplain Development Permit
- U.S. Fish and Wildlife Service
Concurrence with Finding of No Effect for Biological Resources Report
- U.S. Army Corps of Engineers
Section 404 permit for a "Nationwide Permit under the provisions of 33 CFR 330
- Department of Agriculture, Natural Resources Conservation Service
Farmland Conversion Impact Rating

6.3 Other Agencies, Groups, or Persons Contacted or Contributing Information

State of Montana

- Natural Heritage Program
- Montana Rivers Information System

6.4 Public Involvement and Significant Issues

6.4.1 Public Involvement

The project sponsors initiated the project with a preliminary field review held on October 5, 1993. Participants included MDT personnel from Billings, Bozeman, and Helena, and Commissioners and a representative from the Planning Office from Stillwater County. This group evaluated the existing horizontal and vertical approaches to the bridge, the structure itself, and the need for additional right-of-way. Two project alternatives were proposed and discussed (see Section 2.3).

On October 7, 1994, an on-site review/meeting was held with MDT officials, representatives from Stillwater County, and landowners that could potentially be affected by the project. Discussions covered the need for the new bridge and centered on the two alignments developed in October of 1993. Two additional alignment alternatives (see Section 2.3) were also discussed and subsequently evaluated as a result of this meeting and a decision was made to hold a public meeting to consider input from all potentially affected bridge users and landowners.

A public meeting was held on December 6, 1994, at the Reed Point High School library with approximately thirty people in attendance. Representatives from the Stillwater County Commission, MDT and FHWA presented the four preliminary design alternatives and answered questions concerning the options and probable project schedule. A combination of two of the alternatives (the Preferred Alternative as described in Section 2.2) was identified by the participants as best meeting the purpose and need while minimizing impacts on farmland.

Additional coordination and information meetings have continued on a regular basis since the public meeting. Appropriate cooperating agency involvement has also been accomplished.

6.5 Distribution List

Montana Department of Natural Resources and Conservation
Southern Land Office
Airport Industrial Park - IP9
Billings, MT 59105-1978

Montana Department of Environmental Quality
1520 East Sixth Avenue
Box 200901
Helena, MT 59620-0901

Montana Department of Fish, Wildlife and Parks
Box 201001
Helena, MT 59620-1001

Federal Highway Administration
2880 Skyway Drive
Helena, MT 59602

Montana State Library
1515 East 6th Avenue
Box 201800
Helena, MT 59620-1800

Stillwater County Commission
Box 970
Columbus, MT 59019

Stillwater County Library
Box 266
Columbus, MT 59019-0266

Environmental Quality Council
Capitol Station, Box 201704
Helena, MT 59620

APPENDIX A

NRCS Farmland Conversion Impact Rating

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request April 27, 1998	
Name Of Project Yellowstone River Bridge West of Reed Point		Federal Agency Involved USDT - FHWA	
Proposed Land Use Highway Right-of-way		County And State Stillwater County, Montana	
PART II (To be completed by SCS)		Date Request Received By SCS	
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply - do not complete additional parts of this form).		Yes ☐ No ☐	Acres Irrigated
Major Crop(s)		Farmable Land In Govt. Jurisdiction Acres: %	Average Farm Size Acres: %
Name Of Land Evaluation System Used		Name Of Local Site Assessment System	Date Land Evaluation Returned By SCS
PART III (To be completed by Federal Agency)		Alternative Site Rating	
		Site A	Site B
A. Total Acres To Be Converted Directly		13.71	Site C
B. Total Acres To Be Converted Indirectly		0	Site D
C. Total Acres In Site		17.28	
PART IV (To be completed by SCS) Land Evaluation Information			
A. Total Acres Prime And Unique Farmland			
B. Total Acres Statewide And Local Important Farmland			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value			
PART V (To be completed by SCS) Land Evaluation Criterion			
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)			
PART VI (To be completed by Federal Agency)		Maximum Points	
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))			
1. Area In Nonurban Use	15	14	
2. Perimeter In Nonurban Use	10	9	
3. Percent Of Site Being Farmed	20	10	
4. Protection Provided By State And Local Government	20	0	
5. Distance From Urban Builtup Area	N/A	--	
6. Distance To Urban Support Services	N/A	--	
7. Size Of Present Farm Unit Compared To Average	10	0	
8. Creation Of Nonfarmable Farmland	25	0	
9. Availability Of Farm Support Services	5	3	
10. On-Farm Investments	20	4	
11. Effects Of Conversion On Farm Support Services	25	0	
12. Compatibility With Existing Agricultural Use	10	0	
TOTAL SITE ASSESSMENT POINTS	160	40	
PART VII (To be completed by Federal Agency)			
Relative Value Of Farmland (From Part V)		100	
Total Site Assessment (From Part VI above or a local site assessment)		160	100
TOTAL POINTS (Total of above 2 lines)		260	140
Site Selected:		Date Of Selection 4/27/98	Was A Local Site Assessment Used? Yes ☐ No ☒
Reason For Selection:			
This site had a total score of 140 points. 7 CFR 658.4(c), part (2) states that "sites receiving a total score of less than 160 be given a minimal level of consideration for protection and no additional sites be evaluated." No additional sites will require evaluation for this project.			

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 — Federal agencies involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form.

Step 2 — Originator will send copies A, B and C together with maps indicating locations of site(s), to the Soil Conservation Service (SCS) local field office and retain copy D for their files. (Note: SCS has a field office in most counties in the U.S. The field office is usually located in the county seat. A list of field office locations are available from the SCS State Conservationist in each state).

Step 3 — SCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland.

Step 4 — In cases where farmland covered by the FPPA will be converted by the proposed project, SCS field offices will complete Parts II, IV and V of the form.

Step 5 — SCS will return copy A and B of the form to the Federal agency involved in the project. (Copy C will be retained for SCS records).

Step 6 — The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

Step 7 — The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

Part I: In completing the "County And State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

Part III: In completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

Part VI: Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in §658.5(b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will be weighed zero, however, criterion #8 will be weighed a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total weight points at 160.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

Part VII: In computing the "Total Site Assessment Points", where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points; and alternative Site "A" is rated 180 points:

Total points assigned Site A = 180 x 160 = 144 points for Site "A."

Maximum points possible 200

APPENDIX B

1997 Historic Roads and Bridges Programmatic Agreement

Appendix 11. Programmatic Agreement Implementing the Roads and Bridges
Preservation Plan

PROGRAMMATIC AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
AND
THE MONTANA STATE HISTORIC PRESERVATION OFFICE
AFFECTING HISTORIC ROADS AND BRIDGES
IN MONTANA

WHEREAS, the Federal Highway Administration, Montana Division (FHWA), proposes to make Federal funding available to the Montana Department of Transportation (MDT) for that agency's ongoing program to construct or rehabilitate highways and bridges, and

WHEREAS, the FHWA has determined that this federally-assisted program may have an effect upon a certain class of properties included in or eligible for inclusion on the National Register of Historic Places and has consulted with the Advisory Council on Historic Preservation (Council) and the Montana State Historic Preservation Office (SHPO) pursuant to Section 800.13 of the regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act (16 U.S.C.470f); and

WHEREAS, the FHWA and the MDT have developed a Historic Preservation Plan regarding roads and bridges and that document has been subject to review under 36 CFR 800.13 and has been agreed to by FHWA, SHPO and the Council; and

WHEREAS, the MDT participated in the consultation and has been invited to concur in this Programmatic Agreement;

NOW THEREFORE, the FHWA, the Council, and the Montana SHPO agree that the program addressed in this Programmatic Agreement shall be administered in accordance with the following stipulations to satisfy the FHWA's Section 106 responsibility for all individual undertakings of the program.

Stipulations

The FHWA will ensure that the following measures are carried out:

- 1) The FHWA and MDT will implement the Roads and Bridges HPP in lieu of compliance with 36 CFR §§ 800.4 through 800.6.
- 2) This Programmatic Agreement will remain in force for as long as the roads and bridges HPP is in force or unless Stipulation 9 of this Agreement is invoked.
- 3) FHWA will carry out the existing MOA's to preserve or record historic bridges that are now scheduled for replacement.

- 4) The MDT will prepare a report annually on its implementation of the HPP, and provide this report to the FHWA, Montana SHPO and the Council for review, comment and consultation as needed.
- 5) The Council and the SHPO may monitor activities carried out pursuant to this Programmatic Agreement, and the Council will review such activities if so requested by a signatory to this Agreement or by a member of the public. FHWA will cooperate with the Council and the SHPO in carrying out their monitoring and review responsibilities as stipulated in 36 CFR 800.13
- 6) Any party to this Programmatic Agreement may request that it be amended, whereupon the parties consult in accordance with 36 CFR 800.13 to consider such an amendment.
- 7) Any party to this Programmatic Agreement may terminate it by providing, in writing, forty-five (45) days notice to the other parties, provided that the parties will consult during the period prior to termination to seek arrangement on amendments or other actions that would avoid termination. In the event of termination, FHWA will comply with 36 CFR Part 800.4 through 800.6 with regard to individual undertakings covered by this Programmatic Agreement.
- 8) Should the Montana SHPO object within sixty (60) days to any stipulation pursuant to this Historic Preservation Plan, the FHWA shall consult with the objecting party to resolve the objection. If the FHWA determines that the objection cannot be resolved, the FHWA shall forward all documentation relevant to the dispute to the Council. Within thirty (30) days after receipt of all pertinent documentation, the Council will either:
 1. provide the FHWA and Montana SHPO with recommendations, which the FHWA and Montana SHPO will take into account in reaching a final decision regarding the dispute; or
 2. notify the FHWA and Montana SHPO that it will comment pursuant to 36 CFR § 800.6(b), and proceed to comment. Any Council comment provided in response to such a request will be taken into account by the FHWA and Montana SHPO in accordance with 36 CFR § 800.6(c)(2) with reference only to the subject of the dispute; the FHWA and MDT's responsibility to carry out all actions under this Historic Preservation Plan that are not the subjects of the dispute will remained unchanged.
- 9) In the event that the FHWA does not carry out the terms of this Programmatic Agreement, the FHWA will comply with 36 CFR Sections 800.4 through 800.6 with regard to individual undertakings covered by this Programmatic Agreement.

Execution and implementation of this Programmatic Agreement evidences that the FHWA has satisfied its Section 106 responsibilities for all individual undertakings of the program.

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: John M. Lohr

Date: 7/17/97

MONTANA DIVISION, FEDERAL HIGHWAY ADMINISTRATION

By: [Signature]

Date: 7-9-97

MONTANA STATE HISTORIC PRESERVATION OFFICER

By: [Signature]

Date: 7-8-97

CONCUR

MONTANA DEPARTMENT OF TRANSPORTATION

By: John M. Lohr

Date: 7/8/97

APPENDIX C

Programmatic (Nationwide) Section 4(f) Evaluation

MONTANA DIVISION

"NATIONWIDE" PROGRAMMATIC SECTION 4(f) EVALUATION FOR
HISTORIC BRIDGES

Project # BR 9048(14), (P.M.S. C#2477)

Date: 4/24/98

Project Name: Yellowstone River - W. of Reedpoint

Location: Reedpoint, MT

This proposed project requires use of a historic bridge structure that is on, or eligible for listing on the NATIONAL REGISTER OF HISTORIC PLACES. A description and location map of this proposed bridge replacement project is attached.

NOTE: Any response in a box will require additional information, and may result in an individual evaluation/statement. Consult the "Nationwide" Section 4(f) Evaluation procedures.

	<u>YES</u>	<u>NO</u>
1. Is the bridge a NATIONAL HISTORIC LANDMARK?	☐	<u>X</u>
2. Have agreements been reached through the procedures pursuant to <i>Section 106</i> of the <i>National Historic Preservation Act</i> with the following:		
STATE HISTORIC PRESERVATION OFFICE (SHPO)?	<u>X</u>	☐
ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP)?	<u>X</u>	☐
3. Any other agency/ies with jurisdiction at this location?	<u>X</u>	—
a) If "YES" will additional approval(s) for this <i>Section 4(f)</i> application be required?	☐	<u>X</u>
b) List of agencies with jurisdiction at this location:		
USA - CORPS OF ENGINEERS (<i>Section 404</i> Permit)	<u>X</u>	—
USDA - Forest Service	☐	<u>X</u>
USDA - Natural Resources Conservation Service (<i>FPPA</i>)	☐	<u>X</u>
☐ <i>Prime/unique farmland will be minimally affected along portions of the south approach road, but does not occur at existing or proposed bridge locations.</i>		
FEMA Regulatory Floodway (Permit)	<u>X</u>	—
☐ <i>New construction is proposed within a designated 100-year floodplain; therefore, a Floodplain Development Permit will be acquired from the Stillwater County floodplain administrator in compliance with the Montana Floodplain And Floodway Management Act.</i>		
MDFW&P - Parks Division (Fishing Access Site)	☐	<u>X</u>

MDFW&P - Wildlife Division (wetlands)	☐	<u>X</u>
☐ <i>Minor fringe wetlands occur along riverbanks at proposed bridge location. Approximately 0.17 acres will be lost to construction; wetland loss and mitigation will be addressed during Clean Water Act Section 404 permit process; MDFW&P has no jurisdiction over wetland loss relative to permitting.</i>		
MDFW&P - Fisheries Division (MSPA)	☒	—
☐ <i>The bed and banks of the Yellowstone River will be affected by the project; therefore, A 124 permit will be acquired from MDFW&P in compliance with the Montana Stream Protection Act.</i>		
MDNR&C (navigable rivers under state law)	☒	—
☐ <i>Pier placement will occur on lands below the low water mark of a navigable water (Yellowstone River); therefore, a DNR&C land-use license or easement application and an Application for Licensing Structures & Improvements on Navigable Water Bodies (Form DS-432) will be acquired from DNR&C.</i>		
MDEQ - Air And Waste Management Bureau	—	<u>X</u>
MDEQ Permitting and Compliance Division	<u>X</u>	—
☐ <i>Montana Pollutant Discharge Elimination System (MPDES) Permit</i>		
☐ <i>Stormwater Discharge General Permit</i>		
MDNR&C (irrigation systems)	—	<u>X</u>
☐ <i>Irrigation ditches will be minimally affected by the south approach road, but do not occur at the existing or proposed bridge locations.</i>		
Other: <u>MDEQ - Planning, Prevention, and Assistance Division</u>	<u>X</u>	—
☐ <i>Short-Term Exemption from Montana's Surface Water Quality Standards (3A authorization).</i>		
Other: <u>Stillwater County</u>	<u>X</u>	—

ALTERNATIVES & FINDINGS

EACH of the following ALTERNATIVES for this proposed project have been evaluated to avoid the use of the historic bridge:

1. "Do Nothing."
2. Rehabilitate the existing bridge without affecting the historic integrity of the structure in accordance with the provisions of *Section 106* in the *NHPA*.
3. Construct the proposed bridge at a location where the existing historic structure's integrity will not be affected as determined by the provisions of the *NHPA*.

The above ALTERNATIVES have been applied in accordance with this PROGRAMMATIC SECTION 4(f) EVALUATION and are supported by EACH of the following FINDINGS:

<u>YES</u>	<u>NO</u>
------------	-----------

1. The "Do Nothing" **ALTERNATIVE** has been evaluated and has been found to ignore the basic transportation need at this location.

X

☐

This **ALTERNATIVE** is neither feasible nor prudent for the following reasons:

- a) Maintenance — this **ALTERNATIVE** does not correct the structurally deficient condition and/or poor geometrics (clearances, approaches, visibility restrictions) found at the existing bridge. Any of these factors can lead to a sudden catastrophic collapse, and/or a potential injury including loss of life. Normal maintenance will not change this situation.

X

☐

- b) Safety — this **ALTERNATIVE** also does not correct the situation which causes the existing bridge to be considered deficient. Because of these deficiencies, the existing bridge presents serious and unacceptable safety hazards to the travelling public and/or places intolerable restrictions (gross vehicle weight, height, and/or width) on transport.

X

☐

A copy of the MDT Bridge Bureau's Inspection Report is attached.

X

☐

2. The rehabilitation **ALTERNATIVE** has been evaluated with one or more of the following **FINDINGS**:

- a) The existing bridge's structural deficiency is such that it cannot be rehabilitated to meet minimum acceptable load and traffic requirements without adversely affecting the structure's historic integrity.

X

☐

- b) The existing bridge's geometrics (height, width) cannot be changed without adversely affecting the structure's historic integrity.

X

☐

- c) This **ALTERNATIVE** does not correct the serious restrictions on visibility (approach geometrics, structural requirements) which also contributes to an unsafe condition at this location.

X

☐

ALTERNATIVES & FINDINGS (#2 - conclusion)

YES

NO

Is this rehabilitation **ALTERNATIVE** therefore considered to be feasible and/or prudent based on the preceding evaluations?

☐

X

3. The relocation **ALTERNATIVE**, in which the new bridge has been moved to a site that presents no adverse effect upon the existing structure has also been considered under the following **FINDINGS**:

- a) Terrain and/or local geology. The present structure is located at the only feasible and/or prudent site for a bridge on the existing route. Relocating to a new site — either up-, or downstream of the preferred location — will result in extraordinary bridge/approach engineering and associated construction costs.

☐

X

☐ Note: The preferred alternative is to construct the new bridge within 200 feet (downstream) of the existing bridge.

The preferred (*downstream*) site is the only prudent location due to the terrain and/or geologic conditions in the general vicinity.

_____ X

Any other location would cause extraordinary disruption to existing traffic patterns.

_____ X

- b) Significant social, economic and/or environmental impacts. Locating the proposed bridge in other than the preferred (*downstream*) site would result in significant social/economic impacts such as the displacement of families, businesses, or severing of prime/unique farmlands.

_____ X

☐ *Prime/Unique farmlands may be severed by alternative alignments.*

Significant environmental impacts such as the extraordinary involvement in wetlands, regulated floodplains, or habitat of threatened/endangered species are likely to occur in any location outside the preferred site.

_____ X

☐ *Impacts would probably be similar to the preferred site, depending on the precise location of other alternatives. Upstream alternatives would likely result in 4(f) impacts at the MDFW&P Indian Fort Fishing Access Site.*

- c) Engineering and economics. Where difficulty/ies associated with a new location are less extreme than those listed above, the site may still not be feasible and prudent where costs and/or engineering difficulties reach extraordinary magnitudes. Does the **ALTERNATE** (e.g., preferred *downstream*) location result in significantly increased engineering or construction costs (such as a longer span, longer approaches, etc.)?

_____ X

☐ *The existing bridge could not be rehabilitated commensurate with the project purpose and need and retain its historic integrity. Consequently, there is no basis for comparing costs of the new bridge (the alternate location) with those associated with rehabilitation.*

- d) Preservation of existing historic bridge may not be possible due to either or both of the following:

the existing structure has deteriorated beyond all reasonable possibility of rehabilitation for a transportation or alternative use;

_____ X

no responsible party can be located to maintain and preserve the historic structure.

X _____

ALTERNATIVES & FINDINGS (#3. - conclusion:)

YES

NO

Therefore, in accordance with the previously-listed FINDINGS it is neither feasible nor prudent to locate the proposed bridge at a site other than the preferred **ALTERNATE** as described.

X ☐

☐ *Note: The preferred alternative is to construct the new bridge within 200 feet (downstream) of the existing bridge.*

MEASURES TO MINIMIZE HARM

This "Nationwide" Programmatic Section 4(f) Statement applies only when the following **Measures to Minimize Harm** have been assured; a check in a box MAY void the Programmatic application — if so, a full Section 4(f) Evaluation **will be required**:

	<u>YES</u>	<u>NO</u>
1. Is the bridge being rehabilitated under this proposed project?	<u> </u>	<u>X</u>
If "YES", is the historic integrity of the structure being preserved to the greatest extent possible; consistent with unavoidable transportation needs, safety, and load requirements?	<u>NA</u>	<u>[NA]</u>
<u>NOTE:</u> If "NO", refer to item 2., following, to determine <u>Programmatic</u> applicability.		
2. The bridge is being replaced, or rehabilitated to the point where historic integrity is affected. Are adequate records being made of the existing structure under HISTORIC AMERICAN ENGINEERING RECORD standards, or other suitable means developed through consultation with SHPO and the ACHP?	<u>X</u>	☐
☐ <i>This is addressed in/by the Montana Department of Transportation Roads and Bridges Historic Preservation Plan.</i>		
3. If the bridge is being replaced, is the existing structure being <u>made available</u> for alternative use with a responsible party to maintain and preserve same?	<u>X</u>	☐
☐ <i>Stillwater County has been offered the bridge but has thus far determined that it is too large to move. Efforts are ongoing to locate a party interested in obtaining the bridge via the Adopt-A-Bridge program described in the MDT Roads and Bridges Historic Preservation Plan. If no such parties are identified, the bridge will be disassembled following construction of the new bridge.</i>		
4. If the bridge is being adversely affected, has agreement been reached through the <u>Section 106</u> process of the <u>National Historic Preservation Act</u> on these Measures to Minimize Harm (which will be incorporated into the proposed project) with the following:		
SHPO (Date: <u>April 18, 1995; also signed Programmatic Agreement July 8, 1997</u>)	<u>X</u>	☐
ACHP (Date: <u>signed Programmatic Agreement July 17, 1997</u>)	<u>X</u>	☐
FHwA (Date: <u>signed Programmatic Agreement July 8, 1997</u>)	<u>X</u>	☐
A copy of the Programmatic Memorandum of Agreement (P.M.o.A.) signed/approved by these agencies is attached.	<u>X</u>	☐

COORDINATION

There has been additional COORDINATION with the following agencies regarding this proposed project (other than those listed previously):

City/County government: Stillwater County
Local historical society: None
Adjacent property owners: Private Landowners
Others: NA

This proposed project is documented as an Environmental Assessment under the requirements of the *National Environmental Policy Act (42 U.S.C. 4321, et seq.)*.

SUMMARY & APPROVAL - The proposed action meets all criteria regarding the required ALTERNATIVES, FINDINGS, and Measures to Minimize Harm which will be incorporated into this proposed project. This proposed project therefore complies with the July 5, 1983 Programmatic Section 4(f) Evaluation by the U.S. DEPARTMENT OF TRANSPORTATION's Federal Highway Administration. This document is submitted pursuant to 49 U.S.C. 303 and in accordance with the provisions of 16 U.S.C. 470f.

Karl M Helvik
Karl M. Helvik, P.E.
Engineering Bureau Chief
Environmental Services

Date: May 18, 1999

Approved: [Signature]
Federal Highway Administration

Date: 5-18-99

"ALTERNATIVE ACCESSIBLE FORMATS OF THIS
DOCUMENT WILL BE PROVIDED ON REQUEST."

JMM:KMH:MME

Attachments

cc: Bruce Barrett, P.E. - Billings District Administrator
Carl S. Peil, P.E. - Preconstruction Engineer
Joseph P. Kolman, P.E. - Bridge Engineer
Thomas E. Martin, P.E., Right-of-Way Bureau Chief
David W. Jensen, Supervisor - Fiscal Programming Section
Mark A. Wissinger, P.E., Supervisor - Contract Plans Section
Joel M. Marshik, P.E., Manager - Environmental Services

ATTACHMENTS

for

**Programmatic
(Nationwide)
Section 4(f) Evaluation**

Description of the Proposed Action

The proposed project is located on a rural road beginning at the north edge of the community of Reed Point and extending across the Yellowstone River to the north in Stillwater County in south central Montana. Columbus, the county seat, is 27.4 km (17 mi) east on I- 90.

The Montana Department of Transportation (MDT), in conjunction with the Federal Highway Administration (FHWA), proposes to construct a new bridge over the Yellowstone River at this location. This project also includes reconstruction of roadway approaches north and south of the bridge. The existing bridge and abandoned sections of roadway approaches will be removed.

The intent of the project is to replace the existing bridge which has been determined structurally deficient and functionally obsolete and to improve the existing approach roadways to meet design criteria for a desired design speed of 60 km/h (35 mph). This will allow current load restrictions on the bridge to be removed and will improve safety and operation for the traveling public.

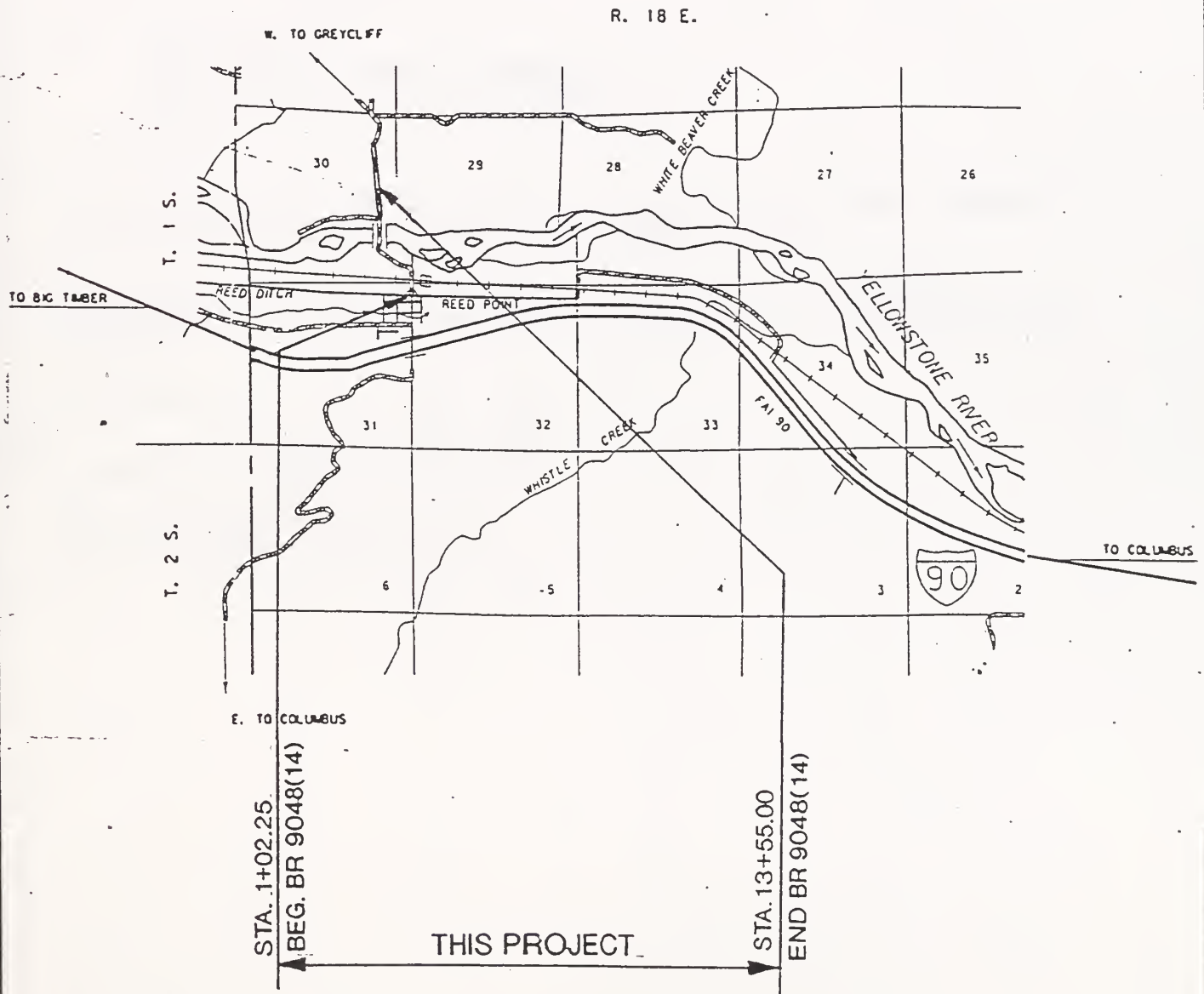
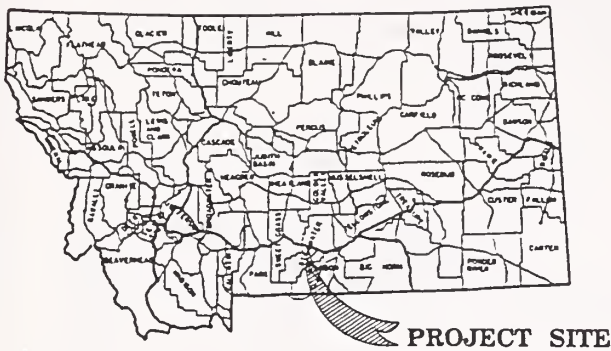
The existing bridge is 143 m (470 ft) long with a 4.6 m (15 ft) wide, single-lane roadway. This structure consists of three 45.7 m (150 ft) span steel Parker trusses and a 6.1 (20 ft) approach span on the south end. Each truss supports timber stringers and timber plank decking. The bridge was built in 1911.

The existing horizontal alignment of the south approach consists of two sharp horizontal curves, one of which is at the south end of the bridge — design speed of these curves is substantially below the desired design speed. The horizontal alignment of the north approach consists of tangents and smooth flowing curves and meets requirements for the desired design speed.

The vertical alignment of the existing south approach consists of a nearly flat grade, which rises abruptly to match the bridge end. The vertical alignment of the existing north approach is a 300 m (1000 ft) uphill grade from the bridge.

The following figure is a general map of the project location.

PROJECT LOCATION MAP



FEDERAL AID PROJECT NO. BR 9048(14)
 YELLOWSTONE RIVER-W. OF REEDPOINT
 STILLWATER COUNTY



State Historic Preservation Office

Montana Historical Society

1410 8th Avenue • PO Box 201202 • Helena, MT 59620-1202 • (406) 444-7715 • FAX (406) 444-6575

April 18, 1995

Jon Axline, Historian
Environmental Services
Montana Department of Transportation
2701 Prospect Avenue
P.O. Box 201001
Helena, MT 59620-1001

RECEIVED
APR 20 1995
ENVIRONMENTAL BUREAU

Re: BR 9048(14)
Yellowstone River - Reedpoint
Control No. 2477 (Stillwater Co.)

Dear Jon:

Thank You for the Cultural Resource Inventory Report and site form which will be placed in our CRABS files.

We acknowledge that this bridge is covered under the Programmatic, and the project area appears to have been fully covered.

Sincerely,

Josef J. Warhank, Historian
Historical Survey Reviewer

File: Comp/ ST Co/ MDT/ 1995

***** IDENTIFICATION *****
(008) STRUCTURE NUMBER: L48083000+0.700-1
(002) HIGHWAY DIVISION: BILLINGS 51
(003) CITY: STILLWATER 95
(004) CITY: 0
(006) FEATURE XED.: YELLOWSTONE RIVER 004
(007) FACILITY CARRIED: COUNTY ROAD 083
(009) LOCATION: NW REED PT
(016) LAT: 45 D 42.8 (017) LONG: 109 D 32.6

***** CLASSIFICATION *****
(SR) SUFFICIENCY RATING: 16.6
(112) NBIS BRIDGE LENGTH: 2
(100) DEFENSE HIGHWAY: 0
(021) MAINTAINED BY: COUNTY HIGHWAY AGY 2
(022) OWNED BY: COUNTY HIGHWAY AGY 2
(037) HISTORICAL SIGNIF: IS ELIGIBLE (STA:)
(PN) PROJECT NO: 000000
(DN) DRAWING NO: 000000

***** AGE AND SERVICE *****
(027) YEAR BUILT: 1911 (106) YEAR RECONS: 0000
(042) TYPE SERVICE: HIGHWAY WATERWAY 15
(028) LANES ON: 1 UNDER: 0 (029) ADT: 31
(030) YEAR ADT: 93 TRUCK ADT: 0%
(019) BYPASS DETOUR LENGTH: 24 MI

***** STRUCTURE TYPE & MATERIAL *****
(043) STRUCTURE TYPE-MAIN: 310
(044) STRUCTURE TYPE-APPR: 702
(045) NO. SPANS-MAIN: 3
(046) NO. SPANS-APPR: 1
(107) DECK STRUCTURE TYPE: TIMBER 8
(108) WEAR SURF/PROTECTIVE SYS: 7 DEPTH: 0 IN
(A) TYPE SURF: TIMBER NONE
(B) TYPE MEMBRANE: NONE
(C) TYPE DECK PROTECTION: NONE

***** GEOMETRIC DATA *****
(048) LENGTH OF MAXIMUM SPAN: 150 FT
(049) CURB/SIDEWALK: 470 FT
(050) BR RDWY WIDTH (CURB): 0.0 FT
(051) TOTAL HORIZ. CLEAR. (CURB/RAIL:): 15.0 FT
(047) DECK WIDTH (OUT TO OUT): 15.0 FT
(052) APPROACH ROADWAY WIDTH: 16.0 FT
(033) BRIDGE MEDIAN: NO MEDIAN
(034) SKEW: 0 D (035) FLARED: 0
(034) MIN VERT CLEAR OVER BR. RDWY: 11 FT
(053) MIN VERT UNDERCLEAR REF: 0 FT
(054) MIN LAT. UNDERCLEAR RT REF: 0 FT
(055) MIN LAT. UNDERCLEAR LT: 0.0 FT
(056)

***** LOAD RATING & POSTING *****
(031) DESIGN LOAD: UNKNOWN
(064) OPERATING RATING: 211
(066) INVENTORY RATING: 211
(LOAD) TYPE 3: 11 T TYPE 3S2: 17 T TYPE 3-3: 20 T
(POST) TYPE 3: 11 T TYPE 3S2: 0 T TYPE 3-3: 0 T
OTHER

***** CONDITION *****
(058) DECK: 6
(059) SUPERSTRUCTURE: 6
(060) SUBSTRUCTURE: 4
(061) CHANNEL/CHAN PROTECT: 8
(062) CULVERT: N
(065) APPR. RDWY CONDITON: 6

***** APPRAISAL *****
(067) STRUCTURAL EVALUATION: 4
(068) DECK GEOMETRY: 3
(069) UNDERCLEAR VERT/HORZ: N
(071) WATERWAY ADEQUACY: 9
(072) APPR. RDWY ALIGNMENT: 3
(113) SCOUR CRITICAL BRIDGES: 6
(036) TRAFFIC SAFETY FEATURES: 0000
BR RAIL TRANS APPR GD TERM

***** INSPECTION *****
(090) LAST INSPECTION DATE: 24 MO.
***** INTERVAL *****
***** DATE *****
12/92

(092,093) CRITICAL FEATURE INSPECT INTERVAL & DATE
CFI DETAIL CFI CAT INTERVAL CFI DATE
A) FRACTURE CRITICAL: Y 48 MO. 00/00
B) UNDERWATER INSP.: Y II-60 48 MO. 00/00
C) PIN CONNECTED: N 0 MO. 00/00
D) SNOOPER: 0 MO. 00/00

***** FIELD INSPECTION *****
INSPECTED BY: Ed S. Moore
DATE INSPECTED: 2/13/95

***** OFFICE REVIEW *****
- BRIDGE EVALUATION UNIT Access u/jwccas?
ENGINEERING REVIEW NECESSARY? X YES NO
REVIEWED BY: B6N DATE 5/28/96

S.I. & A. SUPPLEMENTAL FORM

STRUCTURE NO. L48e8.3 ccto. 700 FEATURE CROSSED Yellowstone River
 INSPECTED BY C. Davis & S. Moore DATE INSPECTED 2/13/95

Page 1 of 3

CONDITION RATINGS

58. 6 DECK

- A. 5 CURBS
- B. 6 FLOORING/SLAB
- C. 4 GUARD ANGLES
- D. 4 JOINTS
- E. 4 MEDIAN
- F. 4 RAIL/BARRIER
- G. 4 SIDEWALKS
- H. 5 WEARING SURFACE
- I. 4 OTHER

59. 5 SUPERSTRUCTURE

- A. 6 BEARING DEVICES
- B. 5 BRACING
- C. 4 DRAINAGE
- D. 6 FLOORBEAMS
- E. 4 GIRDERS
- F. 5 PAINT
- G. 6 STRINGERS - Page 2
- H. 6 TRUSSES
- I. 4 UTILITIES
- J. 4 OTHER

60. 4 SUBSTRUCTURE

- A. 5 ABUTMENTS
- B. 4 BENTS/PIERS
- C. 4 BRACING
- D. 4 CAPS
- E. 5 COLUMNS Bent 2 only
- F. 5 ENDFILLS
- G. 4 FOOTINGS/SILLS
- H. 4 ICE BREAKERS
- I. 6 PILES/POSTS
- J. 5 RETAINING WALLS
- K. 4 OTHER

61. 7 CHANNEL AND CHANNEL PROTECTION

- A. 4 CHANNEL LINING
- B. 6 DRIFT
- C. 4 LEVEES
- D. 8 RIP RAP/CADWORKS
- E. 8 SCOUR/PIPING
- F. 4 SPUR DIKE
- G. 8 STREAM BANK
- H. 8 VEGETATION
- I. 4 OTHER

62. 4 CULVERT

- A. 4 DEPOSITION
- B. 4 EMBANKMENT
- C. 4 FOOTINGS
- D. 4 RAIL/BARRIER
- E. 4 INVERT
- F. 4 JOINTS/BOLTS
- G. 4 RETAINING WALLS
- H. 4 SHAPE
- I. 4 OTHER

65. 6 APPROACH ROADWAY CONDITION

- A. 4 APPROACH SLAB
- B. 4 EMBANKMENT
- C. 4 GUARDRAIL
- D. 4 JOINTS
- E. 5 SHOULDER
- F. 6 SURFACE
- G. 6 TRANSITION
- H. 4 OTHER

71. 9 WATERWAY ADEQUACY

- A. 8 ALIGNMENT
- B. 8 CAPACITY
- C. 9 FREEBOARD
- D. 8 PROFILE
- E. 4 OTHER

72. 3 APPROACH ROADWAY ALIGNMENT

- A. 3 HORIZONTAL CURVE
- B. 6 LATERAL CLEARANCE
- C. 2 LOAD POSTED
- D. 2 SIGNS/MARKERS
- E. 4 VERTICAL CURVE
- F. 4 VISIBILITY
- G. 4 OTHER

REMARKS: 58 A Unpainted & weathered. Many sections splintered & split, areas of light to advanced decay. A few sections missing throughout, some evidently purposely so. B Light snow cover, unable to see most details top. Minor to moderate decay in ends of many Decking Planks. Staining on bottoms; a few are decayed or broken. Unable to closely inspect most of Spans 3 & 4 as are over Underway (from below). Most Decking Planks Panel 6. Span 4 have been replaced. C Unpainted & weathered, several loose areas. Most Posts have minor decay in tops, several are splintered & split, a few loose or partially broken. Many Planks are splintered or split w/ some minor to moderate decay, several are loose & some broken. Broken & missing top Plank RT. approach near Abut. 1; Broken & loose top Plank LT Panel 1 Span 2. Broken splintered & missing end Planks Abut. 5 RT. D Light snow cover, unable to see most details; heavy wear in Running Planks is evident where exposed; a few are loose & splintered at ends. 59 A & E Paint is chipped & peeling w/ mostly light corrosion throughout. Bearing LT. Abut 5 is deeply buried in dirt & gravel; all others have minor dirt & gravel accumulations. B A few loose "X" Braces. Solid Bridging Abut. 2 is split or broken several areas ~ fill sloughing through. 2 sections Solid Bridging over Bent 2 missing; a few loose elsewhere, loose Abut. 5 w/ fill pressure. D & E Fracture Critical this inspection ~ see attached Truss Form. F Paint on all steel elements is chipped & peeling w/ mostly light to moderate corrosion, areas of severe corrosion ~ see also attached Truss Form.

Cont'd Page 2

P R I O R I T Y	MAINTENANCE ACTIVITY NUMBERS	MAINTENANCE RECOMMENDATIONS FEDERAL-AID - STATE MAINTAINED ONLY		MAINTENANCE FORCES	
				REPAIRS COMPLETED BY:	DATE

S.I. & A. SUPPLEMENTAL FORM

STRUCTURE NO. L48083 octo-700 FEATURE CROSSED Yellowstone River

INSPECTED BY C Davis & S. Moore DATE INSPECTED 2/13/95

Page 2 of 3

CONDITION RATINGS

58. ☐ DECK

- A. CURBS
- B. FLOORING/SLAB
- C. GUARD ANGLES
- D. JOINTS
- E. MEDIAN
- F. RAIL/BARRIER
- G. SIDEWALKS
- H. WEARING SURFACE
- I. OTHER

59. ☐ SUPERSTRUCTURE

- A. BEARING DEVICES
- B. BRACING
- C. DRAINAGE
- D. FLOORBEAMS
- E. GIRDERS
- F. PAINT
- G. STRINGERS
- H. TRUSSES
- I. UTILITIES
- J. OTHER

60. ☐ SUBSTRUCTURE

- A. ABUTMENTS
- B. BENTS/PIERS
- C. BRACING
- D. CAPS
- E. COLUMNS
- F. ENDFILLS
- G. FLOODINGS/SILLS
- H. ICE BREAKERS
- I. PILES/POSTS
- J. RETAINING WALLS
- K. OTHER

61. ☐ CHANNEL AND CHANNEL PROTECTION

- A. CHANNEL LINING
- B. DRIFT
- C. LEVEES
- D. RIP RAP/GABIONS
- E. SCOUR/PIPING
- F. SPUR DIKE
- G. STREAM BANK
- H. VEGETATION
- I. OTHER

62. ☐ CULVERT

- A. DEPOSITION
- B. EMBANKMENT
- C. FOOTINGS
- D. RAIL/BARRIER
- E. INVERT
- F. JOINTS/BOLTS
- G. RETAINING WALLS
- H. SHAPE
- I. OTHER

65. ☐ APPROACH ROADWAY CONDITION

- A. APPROACH SLAB
- B. EMBANKMENT
- C. GUARDRAIL
- D. JOINTS
- E. SHOULDERS
- F. SURFACE
- G. TRANSITION
- H. OTHER

71. ☐ WATERWAY ADEQUACY

- A. ALIGNMENT
- B. CAPACITY
- C. FREEBOARD
- D. PROFILE
- E. OTHER

72. ☐ APPROACH ROADWAY ALIGNMENT

- A. HORIZONTAL CURVE
- B. LATERAL CLEARANCE
- C. LOAD POSTED
- D. SIGNS/MARKERS
- E. VERTICAL CURVE
- F. VISIBILITY
- G. OTHER

APPRAISAL RATINGS

Note that Utility connections may be adversely affecting Stringers to which they are attached.

REMARKS: Cont'd from Page 1. **59** **G** Span 1: 2nd from LT. has horizontal split near bottom, both sides ~ see 2/7/91 Sketch ~ looks as if section below split is about to break out. RT. exterior Stringer is split & decayed interior face over Abut. 1 ~ see Photo. Span 2: Panel 1: 5th from LT. checked RT. side only. Panel 2: 4th from LT. has horizontal split near bottom both sides. Panel 3: RT. exterior Stringer split & splintered near L-3, possibly caused by Utility connection. Panel 4: 5th from LT. horizontal split near bottom RT. side only. RT. exterior Stringer split near top, exterior face near Utility connection near L-4. Panel 5: LT. exterior Stringer checked exterior face, one short diagonal crack near top, RT. face. Panel 8: LT. exterior Stringer had diagonal splits near top, exterior face near Rail Post connection. Span 3: Panel 3: 4th 5th 6th & 7th split on ^{both} sides. Panel 4: 3rd from LT. split both sides. 4th from LT. split, possibly cracked or breaking, both sides, near mid-Panel. NOTE: Most of Span 3 inspected w/monocular from ice; beyond Panel 4 no other Stringer defects were ^{visible}. Span 4: NOTE: Panels 1 to 6 were inspected w/monocular from ice ~ no defects visible Panels 1 to 4. Panel 5: 5th Stringer from LT. split both sides, L-4 end. 6th from LT. has horizontal split near bottom both sides. Panel 7: LT. exterior Stringer checked exterior face. 4th from LT. checked both sides. RT. exterior is slightly checked exterior face. Panel 8: RT. exterior & 2nd from RT. are abraded & splintered at bottom ~ near Abut. 5 ~ may have been caused by large rock rolling down end slope. RT. exterior checked & ^{split horizontally} exterior face. Note that all Stringers throughout are stained.

Cont'd
Page 3

MAINTENANCE RECOMMENDATIONS

FEDERAL-AID - STATE MAINTAINED ONLY

MAINTENANCE FORCES

REPAIRS COMPLETED BY: DATE

P R I O R I T Y	MAINTENANCE ACTIVITY NUMBERS	MAINTENANCE RECOMMENDATIONS		MAINTENANCE FORCES	
		FEDERAL-AID - STATE MAINTAINED ONLY		REPAIRS COMPLETED BY:	DATE

S.I. & A. SUPPLEMENTAL FORM

STRUCTURE NO. L48e83 onto 700

FEATURE CROSSED Yellowstone River

INSPECTED BY C. Davis & S. Moore

DATE INSPECTED 2/13/95

Page 3 of 3

CONDITION RATINGS

58. ☐ DECK

- A. ☐ CURBS
- B. ☐ FLOORING/SLAB
- C. ☐ GUARD ANGLES
- D. ☐ JOINTS
- E. ☐ MEDIAN
- F. ☐ RAIL/BARRIER
- G. ☐ SIDEWALKS
- H. ☐ WEARING SURFACE
- I. ☐ OTHER

59. ☐ SUPERSTRUCTURE

- A. ☐ BEARING DEVICES
- B. ☐ BRACING
- C. ☐ DRAINAGE
- D. ☐ FLOORBEAMS
- E. ☐ GIRDERS
- F. ☐ PAINT
- G. ☐ STRINGERS
- H. ☐ TRUSSES
- I. ☐ UTILITIES
- J. ☐ OTHER

60. ☒ SUBSTRUCTURE

- A. ☒ ABUTMENTS
- B. ☒ BENTS/PIERS
- C. ☒ BRACING
- D. ☒ CAPS
- E. ☒ COLUMNS Bent 2 only
- F. ☒ ENOFILLS
- G. ☒ FOOTINGS/SILLS
- H. ☒ ICE BREAKERS
- I. ☒ PILES/POSTS
- J. ☒ RETAINING WALLS
- K. ☒ OTHER

61. ☒ CHANNEL AND CHANNEL PROTECTION

- A. ☒ CHANNEL LINING
- B. ☒ DRIFT
- C. ☒ LEVEES
- D. ☒ RIP RAP/BAGGONS
- E. ☒ SCOUR/PIPING
- F. ☒ SPUR DIKE
- G. ☒ STREAM BANK
- H. ☒ VEGETATION
- I. ☒ OTHER

62. ☒ CULVERT

- A. ☒ DEPOSITION
- B. ☒ EMBANKMENT
- C. ☒ FOOTINGS
- D. ☒ RAIL/BARRIER
- E. ☒ INVERT
- F. ☒ JOINTS/BOLTS
- G. ☒ RETAINING WALLS
- H. ☒ SHAPE
- I. ☒ OTHER

65. ☒ APPROACH ROADWAY CONDITION

- A. ☒ APPROACH SLAB
- B. ☒ EMBANKMENT
- C. ☒ GUARORAIL
- D. ☒ JOINTS
- E. ☒ SHOULDERS
- F. ☒ SURFACE
- G. ☒ TRANSITION
- H. ☒ OTHER

APPRAISAL RATINGS

71. ☒ WATERWAY ADEQUACY

- A. ☒ ALIGNMENT
- B. ☒ CAPACITY
- C. ☒ FREEBOARD
- D. ☒ PROFILE
- E. ☒ OTHER

72. ☒ APPROACH ROADWAY ALIGNMENT

- A. ☒ HORIZONTAL CURVE
- B. ☒ LATERAL CLEARANCE
- C. ☒ LOAD POSTED
- D. ☒ SIGNS/MARKERS
- E. ☒ VERTICAL CURVE
- F. ☒ VISIBILITY
- G. ☒ OTHER

REMARKS: Cont'd from Page 2. ☒ (A, E, J) Areas of light to severe scaling w/ some delamination & spalls w/ exposed corroding rebar Abut. 1; vertical & random cracks to 2mm wide. Severe scaling top end of RT. Wing Wall; areas of light to severe scaling & spalls w/ exposed corroding rebar both Wings. ☒ (B, E, G, H, I) Severe scaling w/ section loss at top LT & RT ends Bent 2 & Piers 3 & 4; severe scaling near or around Bearings. Severe scaling w/ section loss 15mm to 300mm deep at & below water lines Piers 3 & 4 w/ exposed timber Piling. Extensive hairline vertical & random cracks w/ leaching & light to heavy efflorescence, a few delaminated or spalled areas w/ some exposed corroding rebar. Severe scaling behind Ice Breakers; Ice Breakers are loose, unpainted w/ moderate to severe corrosion. ☒ (E) Erosion LT & RT Abut. 5 & under Span 4 near Abut. ☒ (B) Moderate at Pier 3. ☒ (C, E, G) Slight settlement at bridge ends w/ humps; gravel surface is rutted & bumpy. ☒ (C) Flex-Barr & Posts RT Abut. 5 are ~~damaged~~ damaged & knocked over part way; 1 Rail Post broke off at groundline. Other Rail is wood ~ unpainted & weathered, loose w/ broken planks falling down LT Abut. 5. ☒ (E) Erosion LT Abut. 5. ☒ (B, E, C) Remote chance of overtopping ~ large bridge opening. ☒ (A, E, E, F) Sharp Horizontal Curve to Abut. 1, "I" intersection LT Abut. 5. Moderate Vertical Curve, reduced Visibility. ☒ (P, R, I, O, R, I, T, Y) Substantial speed reduction necessary. ☒ (B) Narrow ~ sufficient for one-lane traffic only. ☒ (C & D) Both Load Posting Signs are down/missing. Only 1 Marker, RT Abut. 5 ~ very dirty & slightly bent.

P R I O R I T Y	MAINTENANCE ACTIVITY NUMBERS	MAINTENANCE RECOMMENDATIONS FEDERAL-AID - STATE MAINTAINED ONLY		MAINTENANCE FORCES	
				REPAIRS COMPLETED BY:	DATE

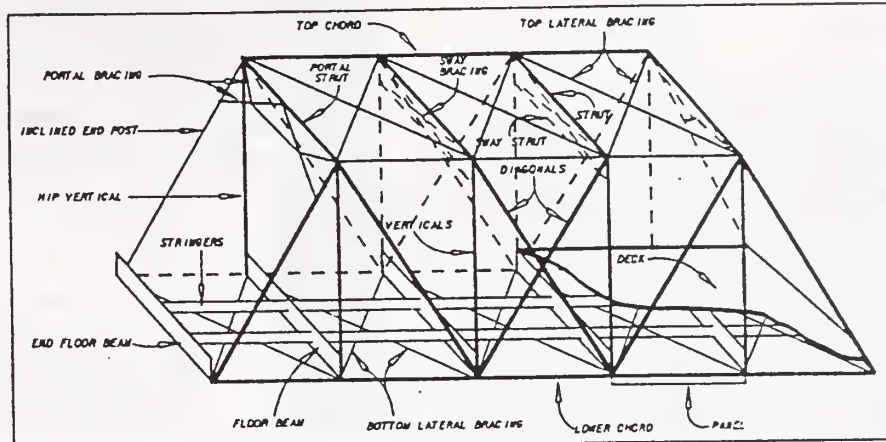
TRUSS CONDITION FORM

STRUCTURE NO. L48083 ~~0000~~ 700 FEATURE CROSSED Yellowstone River
 INSPECTED BY C. Davis & S. Moore DATE INSPECTED 2/13/25

TRUSS COMPONENTS*

- | | |
|------------------------|---------------------------|
| A. END POSTS | H. SWAY BRACING |
| B. PORTAL STRUT | I. LOWER CHORD |
| C. PORTAL BRACING | J. BOTTOM LATERAL BRACING |
| D. TOP CHORD | K. VERTICALS |
| E. TOP LATERAL BRACING | L. DIAGONALS |
| F. TOP LATERAL STRUTS | M. PANEL CONNECTIONS |
| G. SWAY STRUTS | N. OTHER |

* Identify comments alphabetically.



NOTE: Upper chord was inspected from Deck only ~ equipment for better/closer access was unavailable this inspection.

① Interior Channel Beam Flanges bent LT. on L-0 U-1 Span 3 (over Pier 3); also LT. L-0 U-1 Span 2 (over Pier 2). ② Bent at Pier 2 Span 2, Pier 3 Span 2 & Pier 4 Span 3. ③ Several cotter pins missing. Spans 2 & 3. ④ Bent L-7 LT. to L-8 RT. Span 4, slightly bent & twisted L-7 RT to L-8 LT. Span 4.

Paint on all steel elements is chipped & peeling w/ mostly light to moderate corrosion. Areas of severe crevice corrosion & at damaged areas. Dirt & debris accumulations at lower chord connections; several birds' nests at Upper Chord connections. Areas of slightly bent lattice bracing on verticals & diagonals.

Missing Sway Bracing Cotter Pins at Strut/Sway Strut connections:

Span 2: Upper LT. L5U5; both LT. & upper RT. L6U6;

Span 3: Upper RT. L3U3; lower LT. & both RT. L4U4; lower LT. L5U5

SUPPLEMENTAL INSTRUCTIONS

Evaluate and describe items 58-62, 65, 71 and 72 based on the guidelines listed below and in the Inspector's Manual. Condition codes are used to describe the existing, in place bridge in comparison to its as built condition. Codes in the Appraisal Section are used to evaluate the bridge in relation to the level of service it provides to the highway system of which it is part. Maintenance items, listed alphabetically, do not necessarily affect the overall rating given to the major components. Where sketches and narrative descriptions cannot fully describe the deficiency, extra photos should be taken.

Code	Condition	Code	Appraisal
N	NOT APPLICABLE	N	Not applicable
9	EXCELLENT CONDITION	9	Superior to present desirable criteria
8	VERY GOOD CONDITION - no problems noted.	8	Equal to present desirable criteria
7	GOOD CONDITION - some minor problems.	7	Better than present minimum criteria
6	SATISFACTORY CONDITION - structural elements show some minor deterioration.	6	Equal to present minimum criteria
5	FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.	5	Somewhat better than minimum adequacy to tolerate being left in place as is
4	POOR CONDITION - advanced section loss, deterioration, spalling or scour.	4	Meets minimum tolerable limits to be left in place as is
3	SERIOUS CONDITION - loss of section, deterioration, spalling or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.	3	Basically intolerable requiring high priority of corrective action
2	CRITICAL CONDITION - advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the bridge until corrective action is taken.	2	Basically intolerable requiring high priority of replacement
1	"IMMINENT" FAILURE CONDITION - major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability.. Bridge is closed to traffic but corrective action may put back in light service.	1	This value of rating code not used
0	FAILED CONDITION - out of service - beyond correction action.	0	Bridge closed

MAINTENANCE PRIORITIES

The inspector is to enter the letters "C," "P" or "R" under the priority column that best describes the structure's maintenance priority. The inspector shall use his or her best judgment of the condition using these guidelines.

CRITICAL: Requires the immediate attention of maintenance personnel because the structure's integrity is questionable. The Bridge Maintenance Manager, in Helena is to be notified by the Division Maintenance Chiefs. When corrective action has been taken under this priority, the supervisor in charge should complete the bottom portion of this form and attach to Form MMS-97 for return to the Maintenance Administrator.

- | | |
|---|---|
| A. Fractured stringers, girders or beams. | D. Timber structure with broken piles, severely crushed caps. |
| B. Prestressed beams - exposed strands need painting. | E. Holes in deck or spalls and delaminated in excess of 10%. |
| C. Fractured or severely misaligned truss members. | F. Anything unusual (changes, separations, misalignments). |

PREVENTATIVE: Should be attended to in a timely manner to prevent the condition from becoming critical. When corrective action has been taken under this priority, the supervisor in charge should complete the bottom portion of this form and attach to Form MMS-97 for return to the Maintenance Administrator.

- | | |
|---|---|
| A. End fills settling (depending on extent, could be critical). | ROUTINE: Regular items of maintenance needing attention. |
| B. Spalls and delamination of deck between 5% and 10%. | A. Drains and/or joints need cleaning. |
| C. Structural steel and/or bridge rail needs painting. | B. Clean around shoes. |
| | C. Removal of drift and debris from around piers. |

ACTIVITY CODE DESCRIPTIONS

The inspector should enter the activity code which best describes their maintenance recommendations. If the appropriate number is unknown, leave blank for maintenance persons to complete. An activity code is unnecessary for routine maintenance. The 4000 series is specifically for bridges, but other codes may also apply. A complete list of activity codes can be found in the Bridge Inspection and Maintenance Manuals.

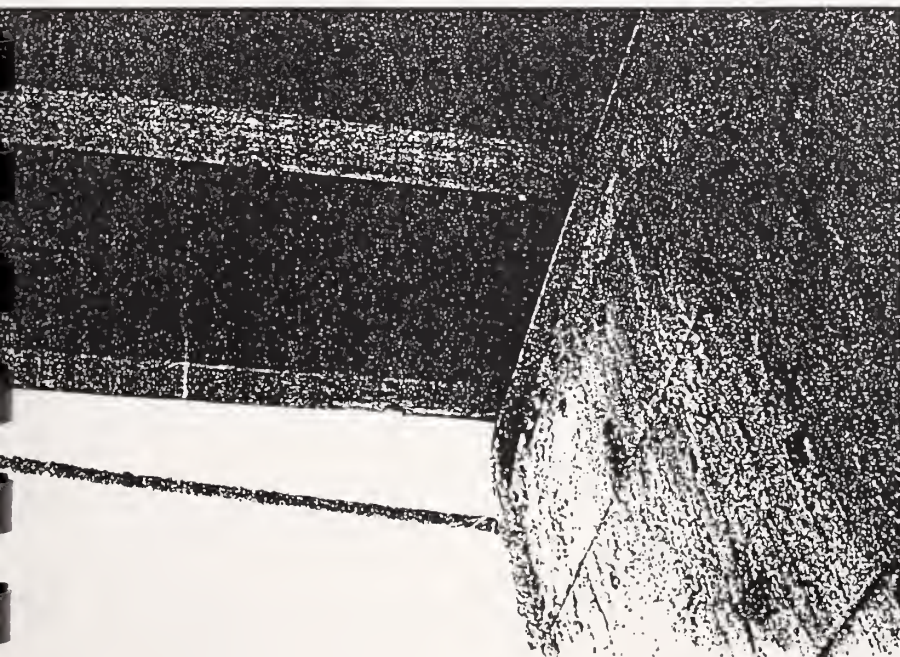
- | | |
|---|---|
| 4101 Structure Painting | 4106 Expansion Joint Repair |
| 4102 Repair Timber Structures | 4107 Bridge Curb and Railing Repair |
| 4103 Concrete Bridge Deck Repair | 4108 Emergency Bridge Repairs |
| 4104 Repair or Replace Structural Steel | 4109 Structure Leveling |
| 4105 Substructure Concrete Repair | 4301 Betterment Work - Bridge Structure |

Distribution: After inspection submit white original to the Bridge Bureau, pink copy to the Division Maintenance Office or local authority (e.g., county, city) and yellow copy for the Division Inspection files.



APPROACH LOOKING SOUTH

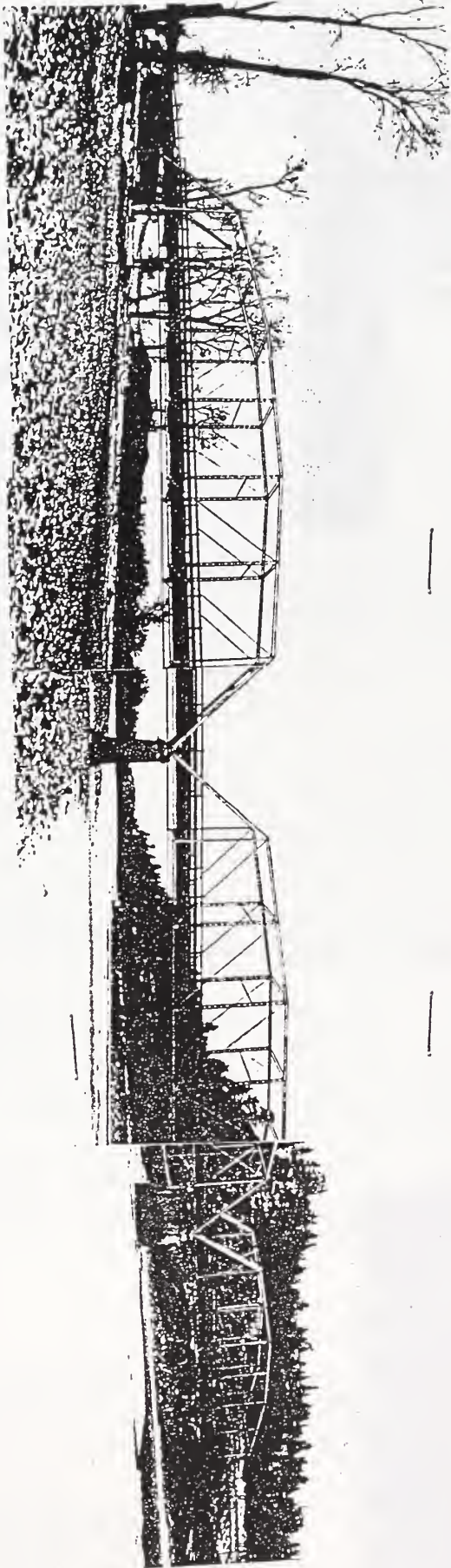
PROFILE LOOKING _____



DECAY AT END OF RIGHT

EXTERIOR STRINGER AT

ABUT #1



APPROACH LOOKING

PROFILE LOOKING WEST

INITIAL ASSESSMENT FORM FOR STRUCTURE :

L48083000+07001

NW REED POINT

Page 1

of :

Form bms00*

General Location Data

District Code, Number, Location : 05 Dist 5 BILLINGS

Division Code, Location : 51 BILLINGS

County Code, Location : 095 STILLWATER

City Code, Location : 00000 RURAL AREA

Kind of Hwy Code, Description : 44 County Hwy

Route Number : 48083

Owner by Code, Description : 2County Highway Agency

Maintained by Code, Location : 2County Highway Agency

Intersecting Feature : YELLOWSTONE RIVER 004

Coincident Structure Number :

Structure on the State System : ☐

Structure on the NHS : ☐

Kilometer Post : 1.126542

Structure Latitude :

45°42'48"

Longitude :

109°32'36"

Structure Rating & Posting Data

Loading Data :

Design Loading Code, Desc :	☐	0 Other or Unknown
Inventory Load, Type, Desc :	9.9	2 AS Allowable Stress
Operating Load, Type, Desc :	9.9	2 AS Allowable Stress
Posting Code, Desc :	☐	0 >39.9% below

Rating Data :

	Operating	Inventory	Posting
Truck Type 1 :	11	11	11
Truck Type 2 :	17	17	
Truck Type 3 :	620	20	

HKM 1-80

Structure Deck, Roadway & Span Data

Traffic Data

Structure Construction Data

Structure Length : 143.26 M

Total ADT : 100

Construction Project Number :

Deck Area : 655 M SQ

Truck Percent : -1 %

Construction Station : +

Deck Roadway Width : 4.57 M

ADT Count Year : 1995

Construction Drawing Number : none

Approach Roadway Width : 6.71 M

Construction Year : 1911

Number of Main Spans : 3

Reconstruction Year : 2000

Number of Approach Spans : 1

Structure Vertical & Horizontal Clearance Data

Vertical Clearance Over : 3.35 M

Horizontal Clearance Under Right : 0.00 M

Vertical Clearance Under : 0.00 M

Horizontal Clearance Under Left : 0.00 M

NBI Inspection Data

Inspection Due Date : 01 February 1997

(91) Inspection Frequency (months) : 24

(90) Date of Last Inspection : 01 February 1995

Sufficiency Rating : 0 11.3

(90) Inspection Date : APR 9, 1997

Structure Status :

(67) Structure Rating : ☐

(68) Deck Geometry : ☐

(36A) Bridge Rail Rating : ☐

(62) Culvert Rating : ☐

(58) Deck Rating : ☐

(72) App Rdwy Align : ☐

(36B) Transition Rating : ☐

(61) Channel Rating : ☐

(59) Superstructure Rating : ☐

(41) Posting Status : ☐

(36C) Approach Rail Rating : ☐

(113) Scour Critical : ☐

(60) Substructure Rating : ☐

(36D) End Rail Rating : ☐

(71) Waterway Adequacy : ☐

Crew Hours for inspection : -1 4

Snooper Required : ☒

Unrepaired Spalls : -1 M SQ

(112) Structure of NBI Length : ☒

Snooper Hours for inspection : -1

Deck Surfacing Depth : IN

S.I.&A. SUPPLEMENTAL FORM

STRUCTURE NO. L48 083 000+0.700-1 FEATURE CROSSED Yellowstone River

INSPECTED BY D. Sell & M. Case DATE INSPECTED Apr. 9, 1997

CONDITION RATINGS

- 58 **6** DECK
 A. **5** CURBS
 B. **6** FLOORING/SLAB
 C. -- GUARD ANGLES
 D. -- JOINTS
 E. -- MEDIAN
 F. **4** RAIL / BARRIER
 G. -- SIDEWALKS
 H. **7** WEARING SURFACE
 I. -- OTHER
- 59 **5** SUPERSTRUCTURE
 A. **6** BEARING DEVICES
 B. **5** BRACING
 C. -- DRAINAGE
 D. **6** FLOORBEAMS
 E. -- GIRDERS
 F. **5** PAINT
 G. **6** STRINGERS
 H. **6** TRUSSES
 I. **6** UTILITIES
 J. -- OTHER conc beams
- 60 **4** SUBSTRUCTURE
 A. **5** ABUTMENTS
 B. **4** BENTS / PIERS
 C. -- BRACING
 D. **4** CAPS
 E. **5** COLUMNS
 F. **5** ENDFILLS
 G. -- FOOTINGS/SILLS
 H. **4** ICE BREAKERS
 I. **6** PILES / POSTS
 J. **5** RETAINING WALLS
 K. -- OTHER
- 61 **7** CHANNEL AND CHANNEL PROTECTION
 A. -- CHANNEL LINING
 B. **6** DRIFT
 C. -- LEVEES
 D. **5** RIPRAP / GABIONS
 E. **8** SCOUR / PIPING
 F. -- SPUR DIKE
 G. **8** STREAM BANK
 H. **8** VEGETATION
 I. -- OTHER

- 62 **--** CULVERT
 A. -- DEPOSITION
 B. -- EMBANKMENT
 C. -- FOOTINGS
 D. -- RAIL / BARRIER
 E. -- INVERT
 F. -- JOINTS / BOLTS
 G. -- RETAINING WALLS
 H. -- SHAPE
 I. -- OTHER
- 65 **6** APPROACH ROADWAY CONDITION
 A. -- APPROACH SLAB
 B. **5** EMBANKMENT
 C. **4** GUARDRAIL
 D. -- JOINTS
 E. **5** SHOULDERS
 F. **7** SURFACE
 G. **7** TRANSITION
 H. -- OTHER

----APPRAISAL RATINGS----

- 71 **9** WATERWAY ADEQUACY
 A. **9** ALIGNMENT
 B. **8** CAPACITY
 C. **9** FREEBOARD
 D. **9** PROFILE
 E. -- OTHER
- 72 **4** APPROACH ROADWAY ALIGNMENT
 A. **4** HORIZONTAL CURVE
 B. **5** LATERAL CLEARANCE
 C. **8** LOAD POSTED
 D. -- SIGNS / MARKERS
 E. **4** VERTICAL CURVE
 F. **4** VISIBILITY
 G. -- OTHER

REMARKS:

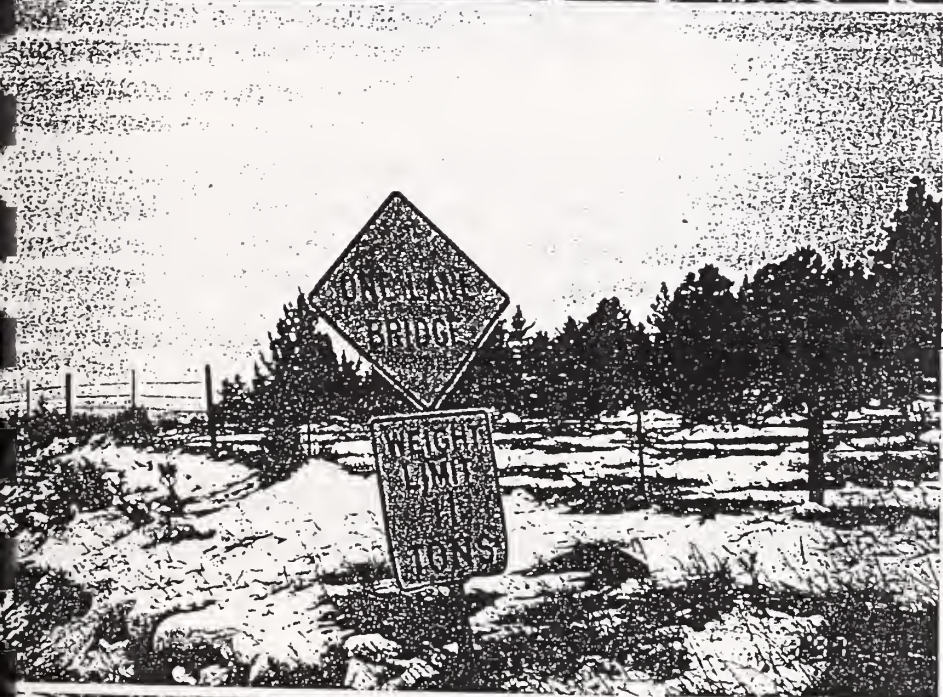
58 A) curbs are splintered with some sections missing. B) water seeping thru
 58 F) Lots of split railing and some are missing. H) New steel running board, three sections are loose.
 59 A & F) paint chipped with light corrosion, bearings at abut 5 buried in dirt, others have minor accumulation of dirt.
 59 B) few loose cross braces, some solid bracing between girders are broken, G) less than six wood stringers have longitudinal cracks.
 59 G) cannot see spans 3 and 4 from below, H) see previous fracture critical report, F) paint on all steel elements has moderate corrosion.
 60 A & J) some severe scaling at abut 1 with exposed corroding rebar, scaling on top of right wingwall, both wings have exposed corroding rebar, F) erosion at lt and rt abut 5.
 60 B D E G H & I) severe scaling with section loss at top ends, bent 2 and piers 3 & 4, severe scaling around bearings, also at water line at piers 3 & 4 with exposed timber piling, see previous photo, severe scaling behind ice breaker, both are loose with heavy corrosion
 61 B) heavy drift at pier 3, D) riprap needed on both sides.
 65 B & E) erosion at north end both sides of abut 5, C) guardrail is broken and down in some areas, see new photo.
 65 F & G) gravel road.
 72 A) sharp, B) one lane structure, E) sharp on north end, F) due to sharp horizontal curve.

Robert J. Sell

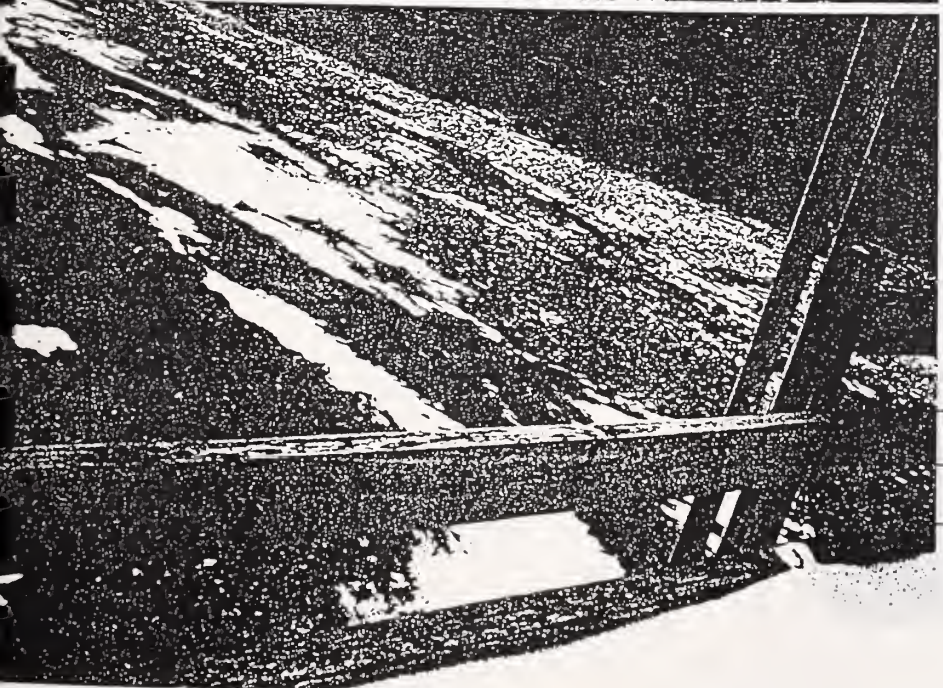
P R I O R I T Y	REPAIRS				
		MAINTENANCE	MAINTENANCE RECOMMENDATIONS	MAINTENANCE FORCES	
		ACTIVITY		REPAIRS	DATE
		NUMBERS	FEDERAL - AID - STATE MAINTAINED ONLY	COMPLETED BY	



AND POSTING
 APPROACH - LOOKING - NORTH



POSTING
~~PROFILE~~ - LOOKING - SOUTH



MISSING RAIL SECTION

STRUCTURE NO. L48 083 000 + 0.700-1

DATE 4-9-97



PROFILE - WEST

To: FILE

From: David F. Johnson

Date: 9/2/98

Subject: L-48 083 000+.700-1 Yellowstone River Bridge @ Reed Point

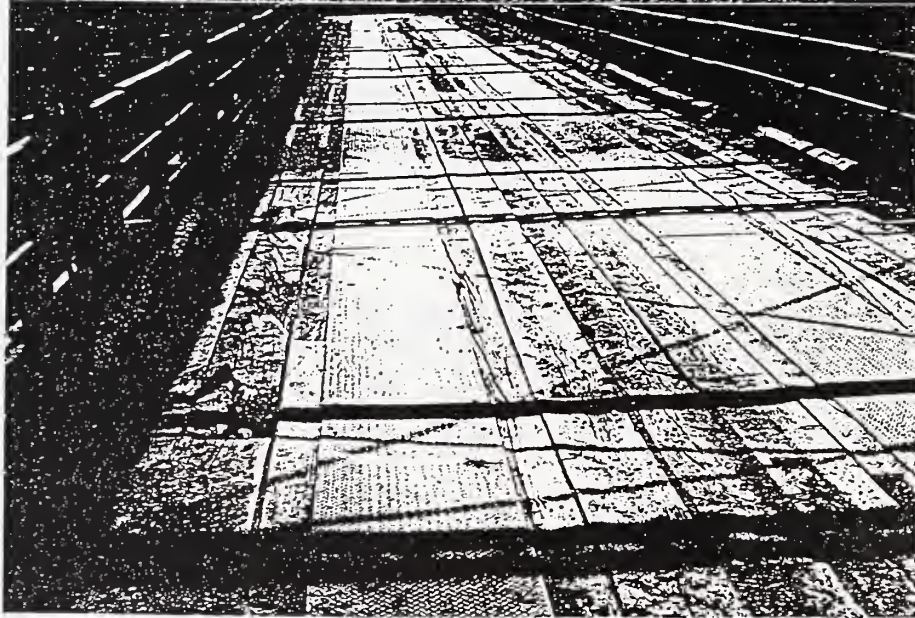
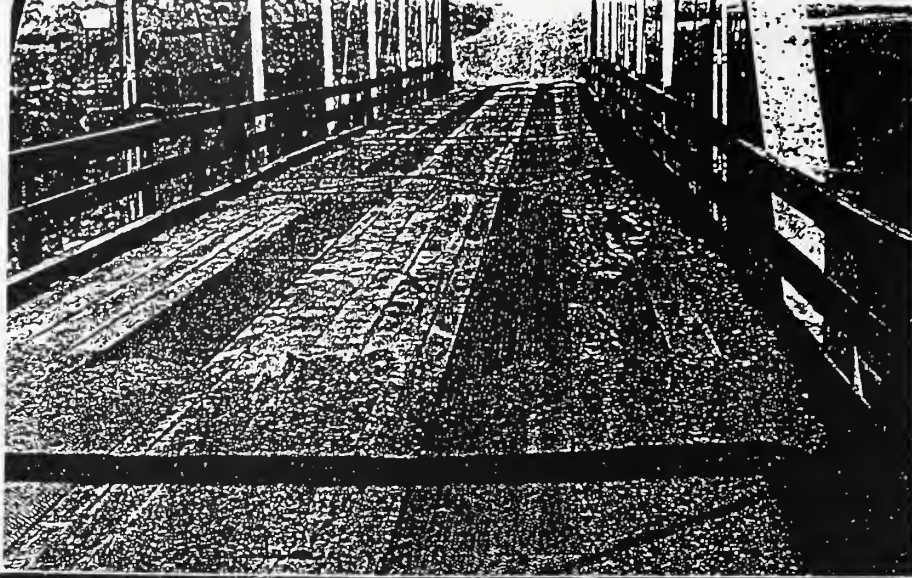
The truss bridge this location is in good condition except for the deck. The deck is composed of transverse 3x12 timber planks over laid with longitudinal 3x12 running planks. Additionally, 1/4 inch thick 2'-0" wide diamond steel plank has been placed in centerline of bridge wheel lines.

The transverse deck planks are in poor condition with local failures in various spans and one failure of longitudinal and transverse deck plank together outside of center wheel track. This deck hole has been covered with 1/4 inch thick steel plate.

I have rated the deck and stringer system assuming the deck not capable of transferring wheel distribution allowed by AASHTO for plank decking of S/4 but of S/2. This was done to check capacity of stringers with a weak deck. The rating for a type 3 truck at inventory level is 8 tons. I assumed an effective deck thickness of 2" with low values of allowable stresses. The deck rating under these assumptions is 6 tons.

Recommendation:

The rating strategy gives conservative values for most of the bridge but may not account for possible local failures outside of center line travel. Signs should be erected indicating center line travel only and posted for 6 tons.



September 3, 1998

Stillwater County Commissioners
PO Box 970
Columbus, Montana 59019-0970

Subject: Structure No. L48 083 000+0.700-1
County Bridge over Yellowstone River NW of Reed Point

The bridge at this location has been evaluated for load carrying capacity. The bridge deck is showing signs of advanced deterioration and distress. The deck is composed of timber planks laid transverse to the direction of traffic overlaid by longitudinal (running) planks and steel plate runners down the center travel lane. The deck sags in various locations of the bridge due to rotten and broken transverse timber deck planks. There is also a one foot wide by two foot long hole through the deck that has been covered by a steel plate.

Our policy on load rating is to rate for three truck types (3, 3S-2, 3-3) at both inventory and operating levels. The inventory level represents that load which can safely use the bridge on a repeated basis for an indefinite period of time. The operating level represents the absolute maximum permissible load level to which the structure may be subjected to on an occasional basis. The table below gives the calculated ratings for the bridge in its current condition.

<i>Load Level</i>	<i>Truck Type and Weight in Tons</i>		
	3	3-S2	3-3
<i>Inventory</i>	6	10	11
<i>Operating</i>	9	13	14

The present load posting of 11 tons for a type-3 truck will need to be reduced to 6 tons. The alternate type R12-5 sign may also be used, which gives the inventory posting for all three truck types.

If you have any questions or comments on this information please give me a call.



David F. Johnson P.E.
Bridge Maintenance Engineer
Bridge Bureau
(406) 444-6018

cc: File

APPENDIX D

Project Correspondence

**Montana Department
of
Fish, Wildlife & Parks**



RECEIVED

SEP 9 1994

ENVIRONMENTAL BUREAU

Gordon J. Stockstad, Acting Manager
Environmental Services
Montana Department of Transportation
2701 Prospect Avenue
P.O. Box 201001
Helena, Montana 59620-1001

2300 Lake Elmo Drive
Billings, MT 59105
September 7, 1994

CC: Myron Wilson
Bridge
Reconstruction

Subject: BR9048(14); Yellowstone River (N.W. of Reedpoint, P.M.S. C#2477)

Dear Mr. Stockstad:

At this point your proposed project poses little potential impact to fisheries and wildlife habitat. Construction impacts upon fisheries will be addressed directly through the Stream Protection Act permitting process.

Fish species known or suspected to occupy the Yellowstone River at Reedpoint and their approximate spawning times are listed below:

<u>Species</u>	<u>Spawning Period</u>
Brown trout	Oct-Dec
Rainbow trout	April-July
Burbot	Dec-Feb
Mt. whitefish	Oct-Nov
Longnose sucker	April-July
White sucker	April-June
Mountain sucker	June-July
Goldeye	March-May
Carp	May-July
Longnose dace	Late spring-early summer
(Notified) Sculpin	May-June
Flathead chub	July?
Shorthead redhorse	April-May
Stonecat	June-August
Cutthroat trout	April-July

Please call Jim Darling (Fisheries Manager) or Charlie Eustace (Wildlife Manager) at 252-4654, if you have further questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "D. Ellis".

Dick Ellis
Regional Supervisor

DE/s

BR 9048 (14)
(#2477)

DEPARTMENT OF STATE LANDS
FIELD OPERATIONS DIVISION



MARC RACICOT, GOVERNOR

SOUTHERN LAND OFFICE
AIRPORT INDUSTRIAL PARK

STATE OF MONTANA

(406) 259-3264

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SEP 12 1994

ENVIRONMENTAL BUREAU

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05-1978

September 9, 1994

Mr. Gordon Stockstad
MT Dept. of Transportation
P. O. Box 201001
Helena, MT 59620-1001

Dear Mr. Stockstad:

I am responding to your letter of August 30, 1994 regarding a bridge project on the Yellowstone River near Reedpoint in Section 30, T1S R18E.

According to department files, there is no easement of record for the existing bridge, so you do need to obtain an easement.

Please find application forms enclosed.

Sincerely,

A handwritten signature in cursive script, appearing to read "Don Kendall".

Don Kendall
Area Manager
Southern Land Office

DK:jw

c. 433.1

**Montana Department
of
Fish, Wildlife & Parks**



1420 East Sixth Avenue
Helena, Montana 59620

OCT 31 1994

ENVIRONMENTAL BUREAU

October 26, 1994

Mr. Gordon Stockstad, Acting Chief
Environmental & Hazardous Waste Bureau
Dept. of Transportation
2701 Prospect
Helena, MT 59620

MASTER FILE
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cc: Myron Wilson
Reconstruction
Bridge

Dear Mr. Stockstad:

RE: BR 9048 (14)
Yellowstone River (N.W. of Reedpoint, P.M.S. C#2477)

We have reviewed your above-mentioned proposed bridge replacement project for the Yellowstone River northwest of Reedpoint.

The Indian Fort FAS is within your project boundaries. These lands have 4(f) usage as defined by Section 4(f) of the 1966 Department of Transportation Act. If you anticipate any impacts to our site as a result of your highway reconstruction, please contact us so we can work with you to mitigate any problems.

The Indian Fort FAS does fall under 6(f) of the Land and Water Conservation Fund Act.

Please keep Dick Ellis, the region five supervisor in Billings, informed as this project develops.

If you need more information regarding the Indian Fort FAS area, please let us know. Thank you for the opportunity to comment. We appreciate your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Mary Ellen Mc Donald".

MARY ELLEN MC DONALD
Administrative Officer
Operations Bureau
Parks Division

cc: Dick Ellis
Ray Berntsen

jg

SAK

HEARD & HOWARD

ATTORNEYS AT LAW

219 NORTH 4TH STREET - P.O. BOX 926

COLUMBUS, MONTANA 59019-0926

(406) 322-4429 OR 4449

RICHARD W. HEARD

DOUGLAS D. HOWARD

December 6, 1994

Stillwater County Commissioners
Stillwater County Courthouse
P. O. Box 149
Columbus, MT 59019

Dear Commissioners:

As the landowners most affected by the proposed new Reed Point bridge, McKeiths would like to take this opportunity to express their views on the construction and location of the bridge and road south of the bridge to the Town of Reed Point.

As we have said consistently in correspondence to the Commissioners, the McKeith Family Partnership, owner of the land south of the bridge, is absolutely in favor of the construction of a new bridge at Reed Point. Their only concern is that the bridge and exit road south from the bridge to the Town of Reed Point be constructed to have the minimum impact on their irrigated lands. Contrary to the hand-out notice concerning the December 6, 1994, public meeting, there were a total of four (4) bridge routes which have been proposed. See November 12, 1994, correspondence from Scott Keller, Design supervisor, attached hereto. Apparently the Commissioners have unilaterally deleted one of the first bridge routes as being NOT an acceptable alternative, even before public meeting and input was received and considered.

When the new Reed Point bridge was first discussed among the State and County agencies, Design Supervisor Scott Keller prepared a design containing two (2) possible alignments for the proposed bridge reconstruction project. The first alternative was a flat bridge deck with a curve exiting south from the bridge into McKeiths' irrigated fields. This route contains two curves through the McKeiths' irrigated fields, both of which are 8% curves and should cause some of the same kinds of problems as an 8% super on a bridge deck. The second alternative from the original decision proposal was a bridge with an 8% super on the bridge deck and an alignment south of the bridge which tied into the existing road. This second alternative is the design preferred by McKeiths. We refer to this bridge design as the Roy Ventura proposal since Mr. Ventura in his December 16, 1993, correspondence addressed to the County Commissioners suggests that the Commissioners reconsider their position on a flat bridge deck which causes a new exit road south of the bridge invading a substantial portion of McKeiths' irrigated fields. The McKeith Ranch Partnership prefers the Roy Ventura proposal for an 8% bridge deck and alignment of the south exit road to the existing constructed road from the bridge to Reed Point.

The Ventura proposal only requires the taking of 3/10ths of an acre of irrigated land. McKeiths wish to state for the record that if the Ventura bridge proposal is selected by the Commissioners as the final construction proposal, McKeiths will donate as much

of their non-irrigated land as is necessary for the project, free of charge. In figuring the cost of the project which was estimated at \$1,179,000, a substantial cost savings could be affected for the taxpayers by Stillwater County being able to acquire the land for the south bridge abutment and the road from the south end of the bridge to the Town of Reed Point free of charge.

The condemnation laws of the State of Montana and Court decisions from the Montana Supreme Court have long held that in routing a highway over private lands, the Highway Department must consider a route which is compatible with the greatest public good and would involve the least private injury. The Courts have also stated that the cost of the project is one of the elements to be considered in determining the public good.

Here the taxpayer, Owen McKeith, is asking that his irrigated lands not be damaged and that a route which can be obtained virtually free of cost be selected as the most appropriate route, that being the Roy Ventura 8% bank bridge which aligns with the existing road right of way south of the bridge. McKeiths have approximately 34 acres of irrigated land adjacent to the south exit of the existing bridge. Mr Ventura's proposal would only invade 3/10ths of one acre of this area. The proposal previously selected in writing by the County Commissioners would invade 4.6 acres of their irrigated land and convert an additional 2.6 acres of irrigated land to non-irrigated due to roadway construction, thus taking 7.2 acres or 20% of the irrigated field.

Banked or curved bridges are in common use in Stillwater and adjacent Counties on secondary, primary and interstate roads. The newest bridge structure in Stillwater County approved by the Stillwater County Commissioners is a banked bridge crossing the Rosebud River between Absarokee and Fishtail. Also, the west exit at Laurel, Montana contains a curved banked overpass in both the east and west bound lanes of the interstate highway. This type bridge must be of a common acceptable design in the State of Montana since this design was one of the first two proposals prepared by State Highway Engineers for the Reed Point bridge project.

If, after the public meetings and all input from landowners and concerned members of the public, the Commissioners determine that the Roy Ventura bank bridge proposal is not acceptable, then McKeiths would ask that the compromise design drafted by Scott Keller, Design Supervisor for the Montana Department of Transportation, be adopted. It is our understanding that this bridge would contain a 2% bank which makes the bridge 48/100ths higher on the west side of the bridge than on the east side of the bridge, or a half a foot higher from west to east over the width of a 24 foot span. Engineer Keller explained that most Interstate highways are currently banked the same 2%, but banked from the center to both shoulders, therefore this amount of bank should not constitute a problem for the public choosing to travel over this type of bridge.

This compromise proposal will invade 2.6 acres of McKeiths' irrigated field and convert another 3/10ths of an acre of irrigated to non-irrigated due to roadway construction for a taking of 2.9 acres of McKeiths' irrigated property. In this proposal, the costs for construction will be considerably higher because McKeiths cannot donate irrigated land free of cost for the construction project. Therefore, this proposal will require compensation to McKeiths for all their land consumed in the bridge and road relocation as well as compensation to McKeiths for the diminution in value to the remaining parcel. It will also increase construction costs due to the necessary relocation of McKeiths' irrigation ditches and headgates.

After having the opportunity to study the four (4) Options explained in the November 12, 1994, correspondence from Scott Keller, Design Supervisor, to the Stillwater County Commissioners, it is McKeiths' position that Options 3 and 4 are totally unacceptable, as they would create an inordinate amount of damage to their existing irrigated crop land.

In summary, McKeiths have had a history of cooperating with Stillwater County for all of the needs of the citizens of the County, including donating land when the access road to the current bridge was redesigned and leasing a site to Stillwater County for the Reed Point green box operation. McKeiths would ask like consideration from the County Commissioners in locating the bridge and access road in a route which serves the needs of the public and does the least amount of harm to their private productive irrigated property.

The meetings with the Montana Department of Transportation officials have made it perfectly clear that the final decision as to the bridge proposal selected is in the sole discretion of the County Commissioners and that the State of Montana will accede to that selection. We respectfully request that the Roy Ventura bank bridge proposal which would do the least harm to the McKeiths' agricultural operation be selected for the new Reed Point bridge.

Respectfully submitted,

Richard W. Heard
Attorney for McKeith Ranch Partnership

RWH:grl
Enclosures

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County of Stillwater State of Montana

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OCT 10 1995 BOARD OF COUNTY COMMISSIONERS

MTA DEPT. OF TRANSPORTATION

P.O. Box 970
Columbus, Montana 59019

October 6, 1995

Bruce H. Barrett
District Administrator
Montana Department of Transportation
424 Morey
P.O. Box 20437
Billings, MT 59104-0437

ENGINEERING FILE CN. 2477
ROJ. NO. BR 9048 (14)
PROJ. NAME Yellowstone River
@ Reed Point.

Dear Bruce,

We recently met with landowners and Montana Department of Transportation officials regarding the alignment of the Yellowstone River Bridge at Reed Point.

This letter is to express our support for the compromise alignment presented by Scott Keller at an October 6, 1995, meeting. We encourage your Department to extend the road surface to the south beyond the railroad tracks to the junction of Highway 10. There are poor grades in this area and safety factors are prime consideration.

We would also urge support for allowing a six percent super elevation on the curve directly to the south of the bridge. We understand this will enable the bridge to be built flat rather than with a two percent super elevation. We are concerned about snow build up on the upper side of the bridge which will lead to winter icing conditions.

We commend your Department for its diligence in working with the county and adjacent landowners to devise a bridge design that considers all the concerns to the best extent possible.

Sincerely,
BOARD OF COUNTY COMMISSIONERS

Vicki J. Hyatt
Vicki J. Hyatt, Chair

Clifford A. Bare
Clifford A. Bare

L. Harold Blattie
L. Harold Blattie



Montana Fish, Wildlife & Parks

1420 East Sixth Avenue
P.O. Box 200701
Helena, MT 59620

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January 8, 1997

Joel M. Marshik, P.E.
Manager - Environmental Services
Montana Department of Transportation
P. O. Box 201001
Helena, MT 59620-1001

Re: MDT Projects - LWCF Section 6(f)

Dear Joel:

The following three projects have been identified as potentially impacting three MDFW&P Fishing Access Sites. The LWCF has been removed from the four FAS' in a large LWCF consolidation project which has recently been approved by National Park Service.

BR 9048(14)
Yellowstone R - W of Reedpoint
Control #2477
Indian Fort FAS

IM 90-7(65)380
Bridger CR-E & W
(P.M.S. C#3099)
Bratten FAS

BR 9049(13)
Yellowstone R - SW of Big Timber
Control #2399
Grey Bear FAS

BR 9001(20)
Big Hole R - SE of Glen
Control #2282 & 2283
Glen FAS

Because the LWCF Section 6(f) protection has been removed from these sites, there will be no Section 6(f) impacts as a result of your projects. Please continue to work with our respective regions in mitigating Section 4(f) impacts.

Please give me a call at 444-3756 if you have questions or need additional information.

Sincerely,

Mary Ellen McDonald
Program Officer
Recreation & Resource Bureau
Parks Division

cc: Tom Reilly



MONTANA NATURAL HERITAGE PROGRAM

1515 East Sixth Avenue
Helena, Montana 59620
(406) 444-3009

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JUN 16 1997

ENVIRONMENTAL

June 13, 1997

Jona Peck
Montana Department of Transportation
Helena, MT 59620

RE: Yellowstone West of Reedpoint Project, Control #2477

Dear Jona:

In response to your request of today, I am enclosing a report on one species of special concern, the Bald Eagle, that occurs in the vicinity of T1S R18E.

Please keep in mind the following when interpreting and using the report and map data:

(1) The results of a data search by the Montana Natural Heritage Program are not intended as a final statement on sensitive species within a given area, or as a substitute for on-site surveys which may be required for environmental assessments.

(2) This report includes sensitive data intended for agency use only and not for general distribution or publication. In particular, public release of specific location information may jeopardize the welfare of a threatened, endangered, or sensitive species or community. This report may also include data from privately-owned lands, and approval by the landowner is advisable if specific location information is considered for distribution.

If needed, additional information is available this species. Please feel free to contact me if you have any questions or require further information.

Sincerely,

Scott Lee-Chadde

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MAR 30 1998

98032410 MDT

March 23, 1998

ENVIRONMENTAL

Paul Putz
State Historic Preservation Office
1410 8th Avenue
P.O. Box 201202
Helena, MT 59620-1202

MAR 24 1998
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Subject: BR 9048(14)
Yellowstone River - West of Reed Point
Control No. 2477

Recently it was brought to our attention that the old Reed Point dump might be located close to the Yellowstone River Bridge (24ST216) near the Area of Potential Effect for the above project. Consequently, we had Ethnoscience conduct additional research in regards to that property. Based on their research and the fact that the dump was significantly disturbed after 1971, we do not believe that testing at this site is necessary to determine its National Register eligibility. According to Lynn Peterson, the dump may have been used from about 1901 until 1970. Peterson suggests, and we agree, that the dump would have little integrity or stratigraphy after it was bulldozed by Mr. Ullery in 1971, which covered the site with 8-10 feet of dirt. The proposed MDT project in the vicinity of the dump would include only the addition of fill material on the north side of the bridge at the approximate location of the dump. We are, therefore, requesting your concurrence that no testing or Section 106 determination of effect is required for the old Reed Point dump.

If you have any questions, please contact me at 444-6258.

Jon Axline
Jon Axline, historian
Environmental Services

CONCUR
MONTANA SHPO

DATE 3/27/98 SIGNED [Signature]

Attachments

cc: Bruce Barrett, Billings District Administrator
Joe Kolman, P.E., Bridge Engineer
Gordon Stockstad, Resources Bureau



COUNTY OF STILLWATER
STATE OF MONTANA
STILLWATER COUNTY COMMISSIONERS
BOX 970
COLUMBUS, MONTANA 59019

April 23, 1999

Montana Department of Transportation
Attention: Karl M. Helvik, Engineering Bureau Chief
MDT Environmental Services
PO Box 201001
Helena, MT 59620-1001

RE: BR 9048 (11) Stillwater R-NE Absarokee (P.M.S. C#2295)
BR 9048 (14) Yellowstone R-W of Reedpoint (P.M.S. C#2477)

Mr. Art Jacobson contacted our office to insure comments were made about the Rough Draft documents for the Environmental Documents for both of the referenced bridge projects in Stillwater County.

The Planning Staff and Stillwater County Road Department have reviewed the documents and did not have comment regarding the information. They did not have concern for the information provided and we would not offer comments at this time.

Other projects in the immediate area are not going on. We have none in the Reedpoint area and only would note the Sheep Creek bridge in the town of Absarokee which is in the planning and design stages and has been referenced.

We appreciate the efforts of the Montana Department of Transportation.

Sincerely,

Charles E. Egan
County Commission, Stillwater County

cc: Linda Lang, Stillwater County Planning Department,
Jack Knorr, Stillwater County Road Department

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ALTERNATIVE ACCESSIBLE FORMATS OF THIS
DOCUMENT WILL BE PROVIDED ON REQUEST.